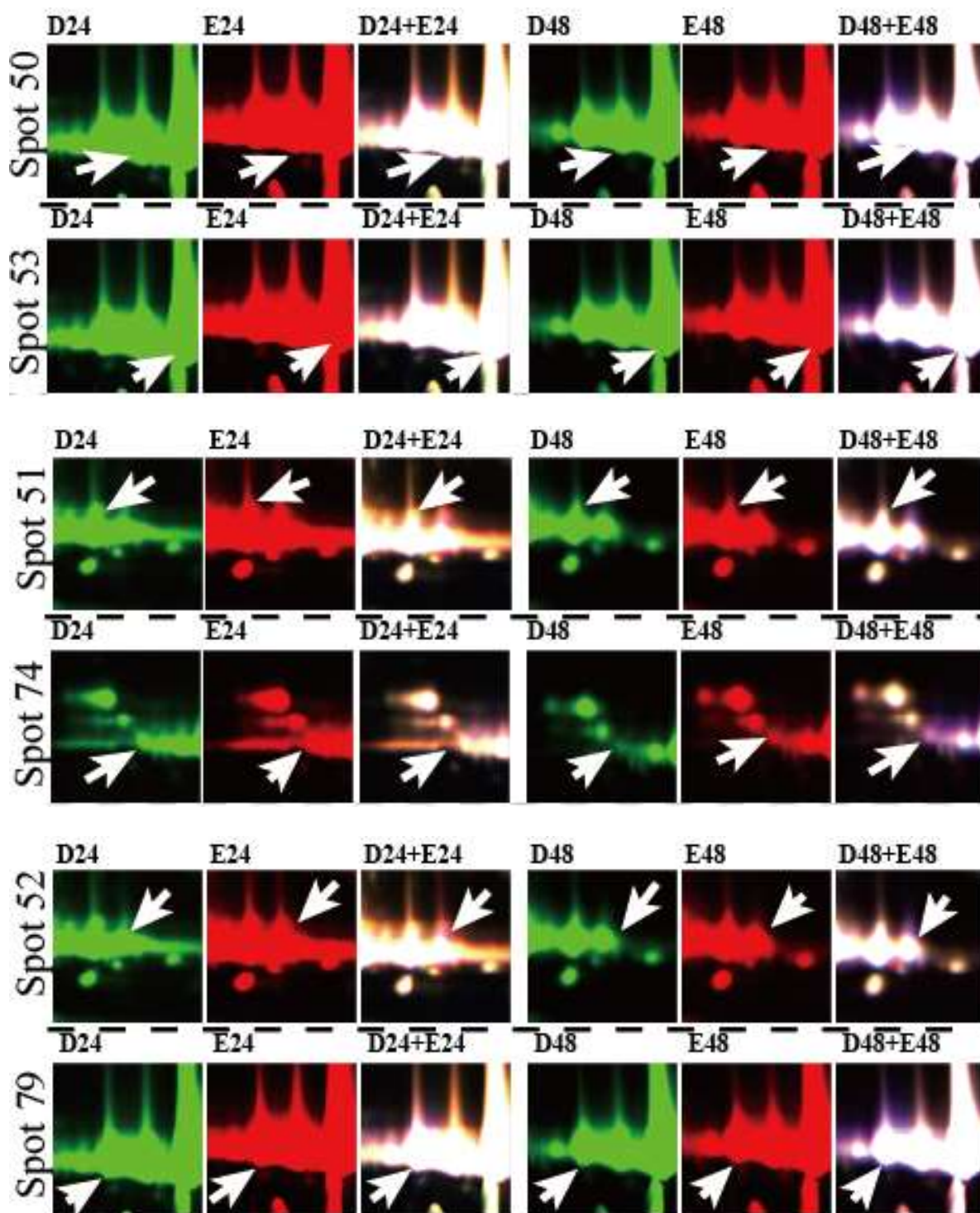


**Figure S3: Phosphopeptides and phosphorylation amino acid sites in different REF and SRPP isoforms**

Protein name: [REF138](#)

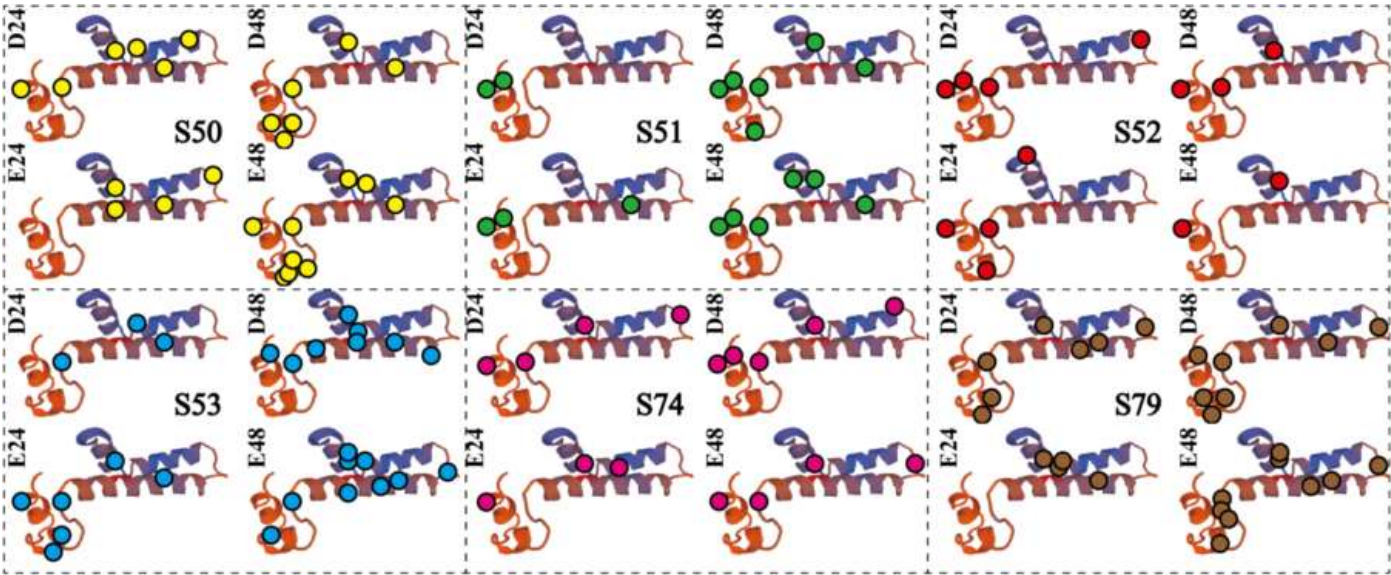
Location of the [six](#) spots identified as [REF138](#) by MS from 2-D DIGE gels:



Detail information for phosphorylation of amino acid sites in [REF138](#):

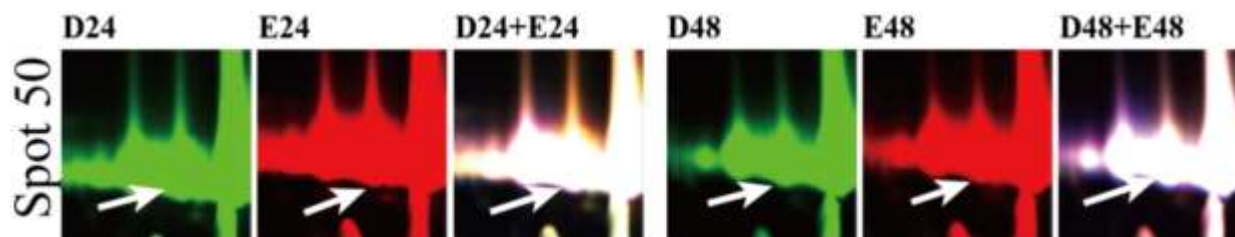
	Spot 50	Spot 51	Spot 52	Spot 53	Spot 74	Spot 79	Share
D24h	MAEDEDNQGGQGEGLKYLGFVQDAATYAVITFSNVYLFAKDKSGPLQPGVDIIEGPVKNAVPLYNRFSYIPNGA						
E24h	MAEDEDNQGGQGEGLKYLGFVQDAATYAVITFSNVYLFAKDKSGPLQPGVDIIEGPVKNAVPLYNRFSYIPNGA						
D48h	MAEDEDNQGGQGEGLKYLGFVQDAATYAVITFSNVYLFAKDKSGPLQPGVDIIEGPVKNAVPLYNRFSYIPNGA						
E48h	MAEDEDNQGGQGEGLKYLGFVQDAATYAVITFSNVYLFAKDKSGPLQPGVDIIEGPVKNAVPLYNRFSYIPNGA						
D24h	LKFVDSITVVASVTIIDRSLPPIVKDASIQVVS						
E24h	LKFVDSITVVASVTIIDRSLPPIVKDASIQVVS						
D48h	LKFVDSITVVASVTIIDRSLPPIVKDASIQVVS						
E48h	LKFVDSITVVASVTIIDRSLPPIVKDASIQVVS						

Predicted 3-D structure and phosphorylated amino acids in different [REF138](#) isoforms:



Spot No. 50

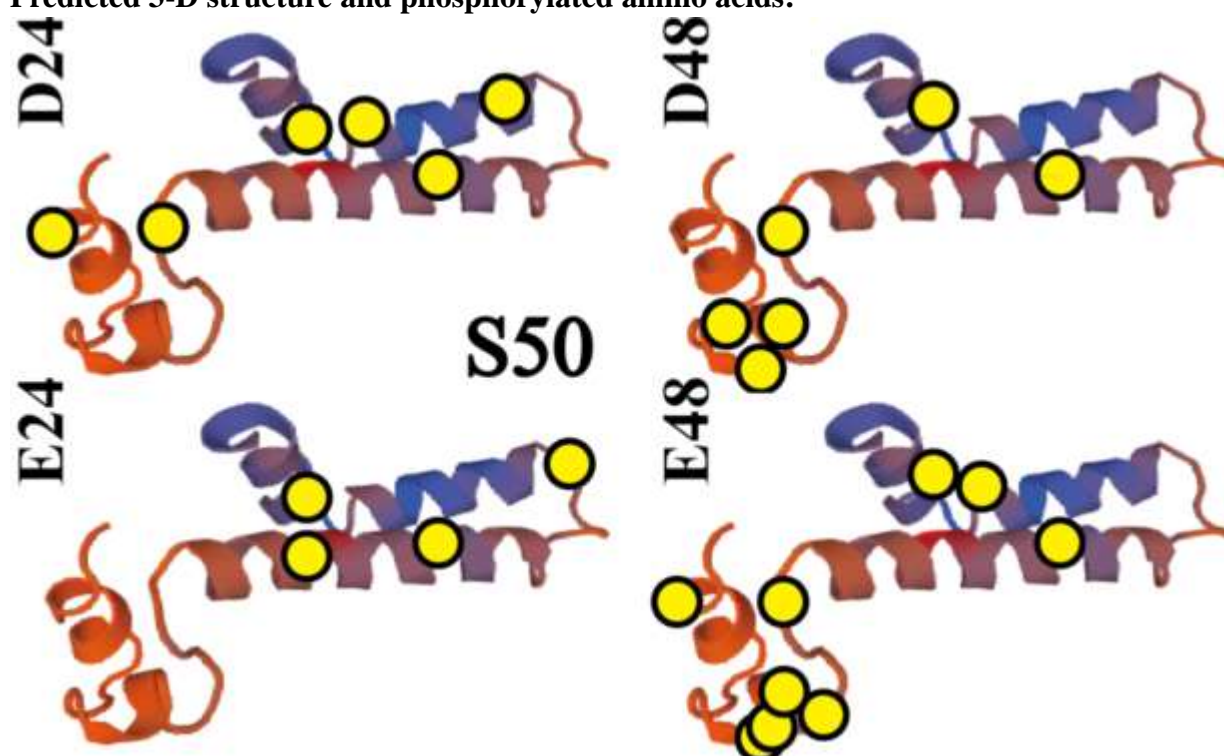
Changed pattern on DIGE gel:



Location in rubber genome: scaffold1222\_136753.mRNA1

Protein name: Rubber elongation factor protein/REF138

Predicted 3-D structure and phosphorylated amino acids:



Detail information for phosphorylation of amino acid sites:

D24: MAEDEDNQGGQGEGLKYLGFVQDAATYAVTTFSNVYLFADKSGPLQPGVDIEGPVKNVAVPLYNRFSYIPNGA

E24: MAEDEDNQGGQGEGLKYLGFVQDAATYAVTTFSNVYLFADKSGPLQPGVDIEGPVKNVAVPLYNRFSYIPNGA

D48: MAEDEDNQGGQGEGLKYLGFVQDAATYAVTTFSNVYLFADKSGPLQPGVDIEGPVKNVAVPLYNRFSYIPNGA

E48: MAEDEDNQGGQGEGLKYLGFVQDAATYAVTTFSNVYLFADKSGPLQPGVDIEGPVKNVAVPLYNRFSYIPNGA

D24: LKFVDSSTVVASVTIIDRSLPPIVKDASIQVVSATRAAPEAARSLASSLPGGTKILAKVIFYGEN

E24: LKFVDSSTVVASVTIIDRSLPPIVKDASIQVVSATRAAPEAARSLASSLPGGTKILAKVIFYGEN

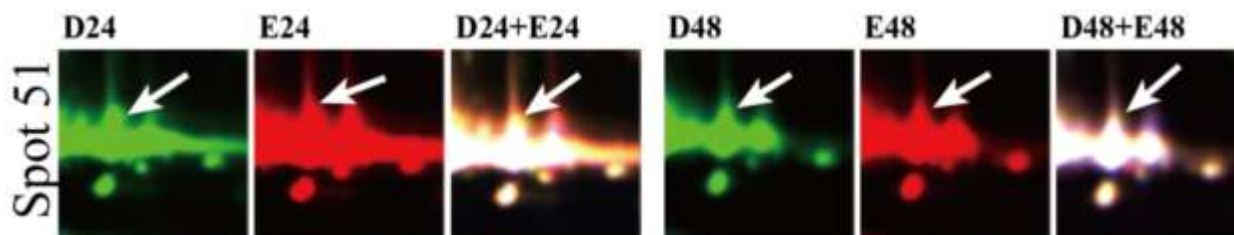
D48: LKFVDSSTVVASVTIIDRSLPPIVKDASIQVVSATRAAPEAARSLASSLPGGTKILAKVIFYGEN

E48: LKFVDSSTVVASVTIIDRSLPPIVKDASIQVVSATRAAPEAARSLASSLPGGTKILAKVIFYGEN



Spot No. 51

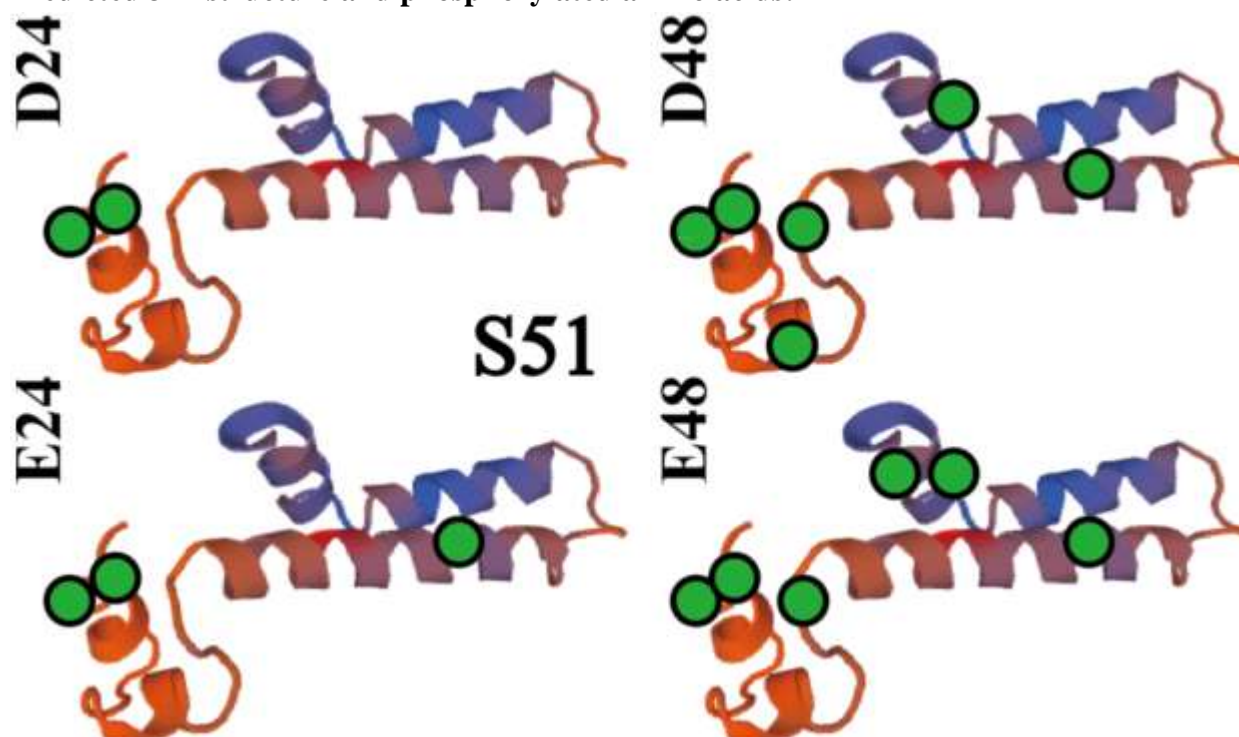
Changed pattern on DIGE gel:



Location in rubber genome: scaffold1222\_136753.mRNA1

Protein name: Rubber elongation factor protein/REF138

Predicted 3-D structure and phosphorylated amino acids:



Detail information for phosphorylation of amino acid sites:

D24: MAEDEDNQGGQGEGLKYLGFVQDAATYAVTTFSNVYLFADKSGPLQPGVDIIEGPVKNVAVPLYNRFSYIPNGA

E24: MAEDEDNQGGQGEGLKYLGFVQDAATYAVTTFSNVYLFADKSGPLQPGVDIIEGPVKNVAVPLYNRFSYIPNGA

D48: MAEDEDNQGGQGEGLKYLGFVQDAATYAVTTFSNVYLFADKSGPLQPGVDIIEGPVKNVAVPLYNRFSYIPNGA

E48: MAEDEDNQGGQGEGLKYLGFVQDAATYAVTTFSNVYLFADKSGPLQPGVDIIEGPVKNVAVPLYNRFSYIPNGA

D24: LKFVDSTVVASVTIIDRSLPPIVKDASIQVVSATRAAPEAARSLASSLPGQTKILAKVIFYGEN

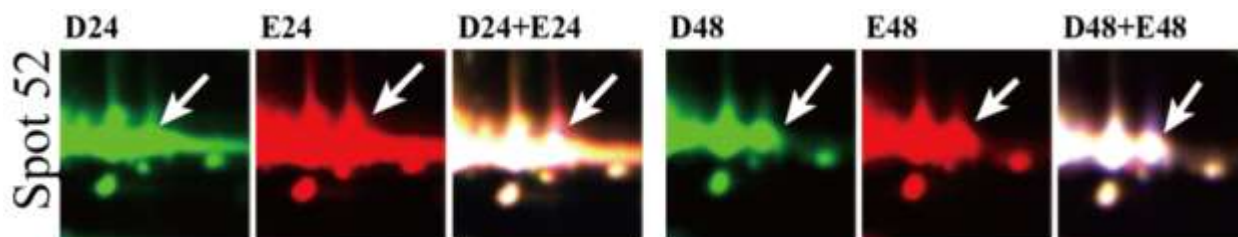
E24: LKFVDSTVVASVTIIDRSLPPIVKDASIQVVSATRAAPEAARSLASSLPGQTKILAKVIFYGEN

D48: LKFVDSTVVASVTIIDRSLPPIVKDASIQVVSATRAAPEAARSLASSLPGQTKILAKVIFYGEN

E48: LKFVDSTVVASVTIIDRSLPPIVKDASIQVVSATRAAPEAARSLASSLPGQTKILAKVIFYGEN

Spot No. 52

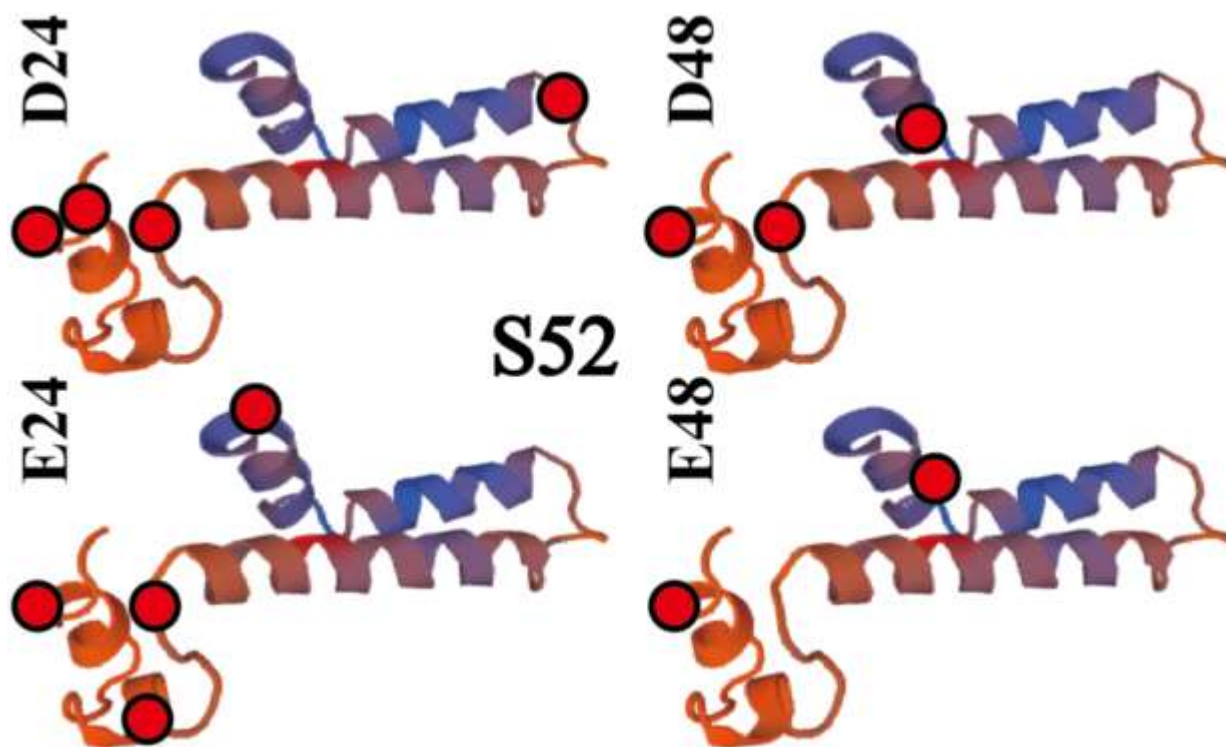
Changed pattern on DIGE gel:



Location in rubber genome: scaffold1222\_136753.mRNA1

Protein name: Rubber elongation factor protein/REF138

Predicted 3-D structure and phosphorylated amino acids:



Detail information for phosphorylation of amino acid sites:

D24: MAEDEDNQQQGEGGLKYLGFVQDAATYAVTTFSNVYLFADKSGPLQPGVDIEGPVKNVAVPLYNRFSYIPNGA

E24: MAEDEDNQQQGEGGLKYLGFVQDAATYAVTTFSNVYLFADKSGPLQPGVDIEGPVKNVAVPLYNRFSYIPNGA

D48: MAEDEDNQQQGEGGLKYLGFVQDAATYAVTTFSNVYLFADKSGPLQPGVDIEGPVKNVAVPLYNRFSYIPNGA

E48: MAEDEDNQQQGEGGLKYLGFVQDAATYAVTTFSNVYLFADKSGPLQPGVDIEGPVKNVAVPLYNRFSYIPNGA

D24: LKFVDSTVVASVTIIDRSLPPIVKDASIQVVSARIAAPEAARSLASSLPGQTKILAKVIFYGEN

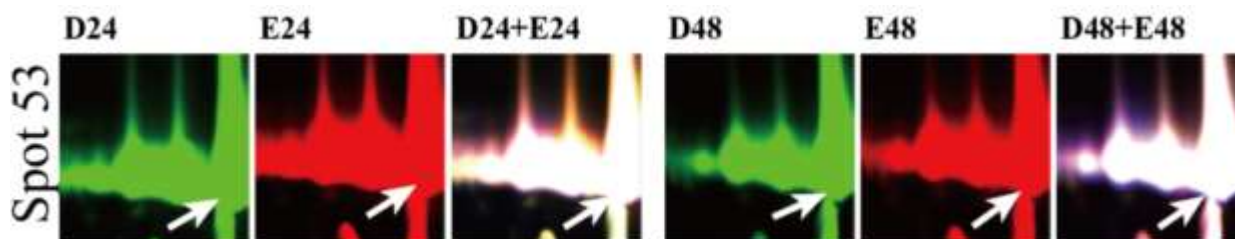
E24: LKFVDSTVVASVTIIDRSLPPIVKDASIQVVSARIAAPEAARSLASSLPGQTKILAKVIFYGEN

D48: LKFVDSTVVASVTIIDRSLPPIVKDASIQVVSARIAAPEAARSLASSLPGQTKILAKVIFYGEN

E48: LKFVDSTVVASVTIIDRSLPPIVKDASIQVVSARIAAPEAARSLASSLPGQTKILAKVIFYGEN

Spot No. 53

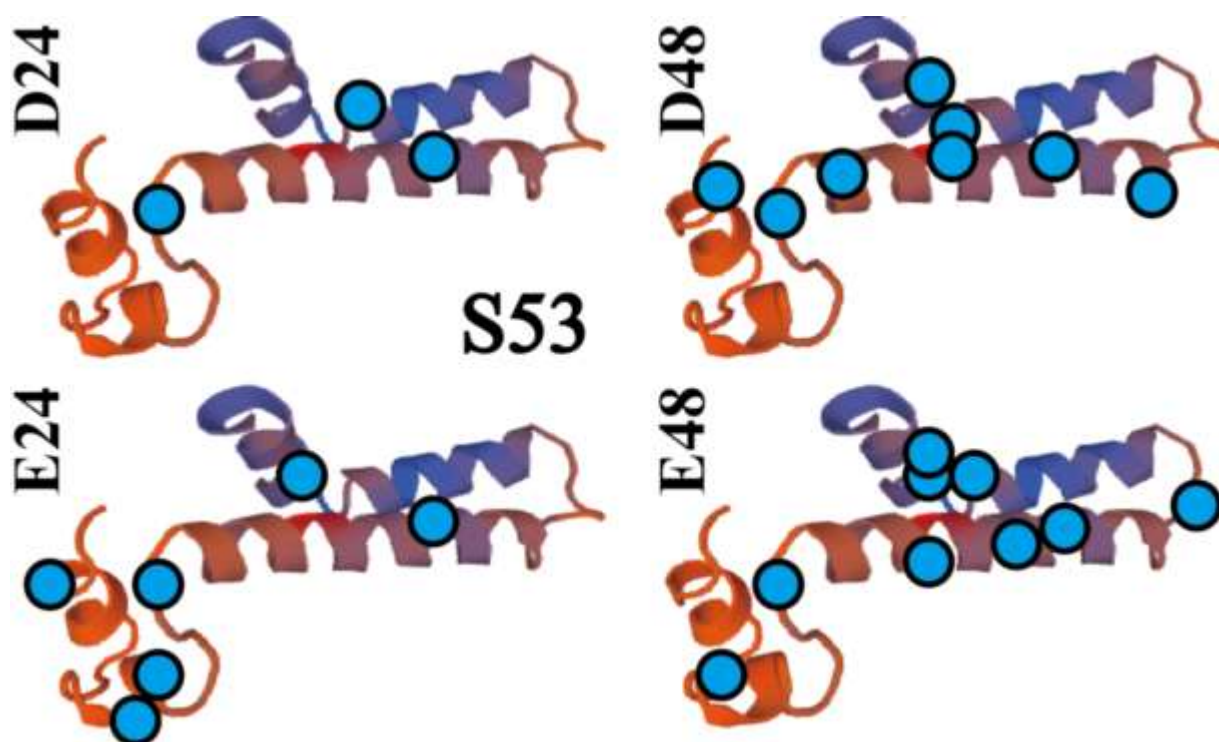
Changed pattern on DIGE gel:



Location in rubber genome: scaffold1222\_136753.mRNA1

Protein name: Rubber elongation factor protein/REF138

Predicted 3-D structure and phosphorylated amino acids:



Detail information for phosphorylation of amino acid sites:

D24: MAEDEDNQQQGEGGLKYLGFVQDAATYAVTTFSNVYLFADKSGPLQPGVDIEGPVKNVAVPLYNRFSYIPNGA

E24: MAEDEDNQQQGEGGLKYLGFVQDAATYAVTTFSNVYLFADKSGPLQPGVDIEGPVKNVAVPLYNRFSYIPNGA

D48: MAEDEDNQQQGEGGLKYLGFVQDAATYAVTTFSNVYLFADKSGPLQPGVDIEGPVKNVAVPLYNRFSYIPNGA

E48: MAEDEDNQQQGEGGLKYLGFVQDAATYAVTTFSNVYLFADKSGPLQPGVDIEGPVKNVAVPLYNRFSYIPNGA

D24: LKFVDSSTVVASVTIIDRSLPPIVKDASIQVVSATRAAPEAARSLASSLPQGQTKILAKVIFYGEN

E24: LKFVDSSTVVASVTIIDRSLPPIVKDASIQVVSATRAAPEAARSLASSLPQGQTKILAKVIFYGEN

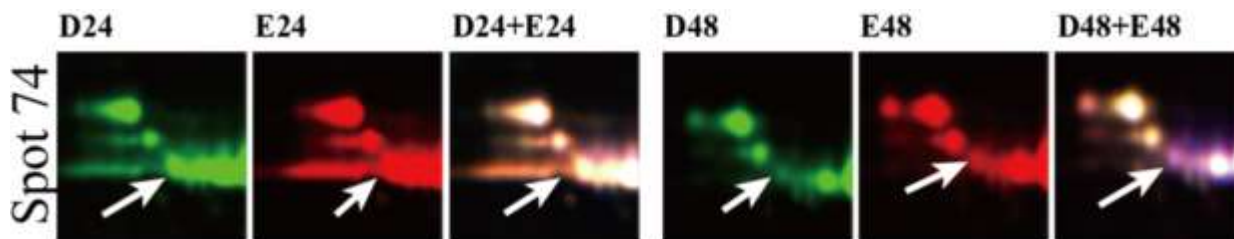
D48: LKFVDSSTVVASVTIIDRSLPPIVKDASIQVVSATRAAPEAARSLASSLPQGQTKILAKVIFYGEN

E48: LKFVDSSTVVASVTIIDRSLPPIVKDASIQVVSATRAAPEAARSLASSLPQGQTKILAKVIFYGEN



Spot No. 74

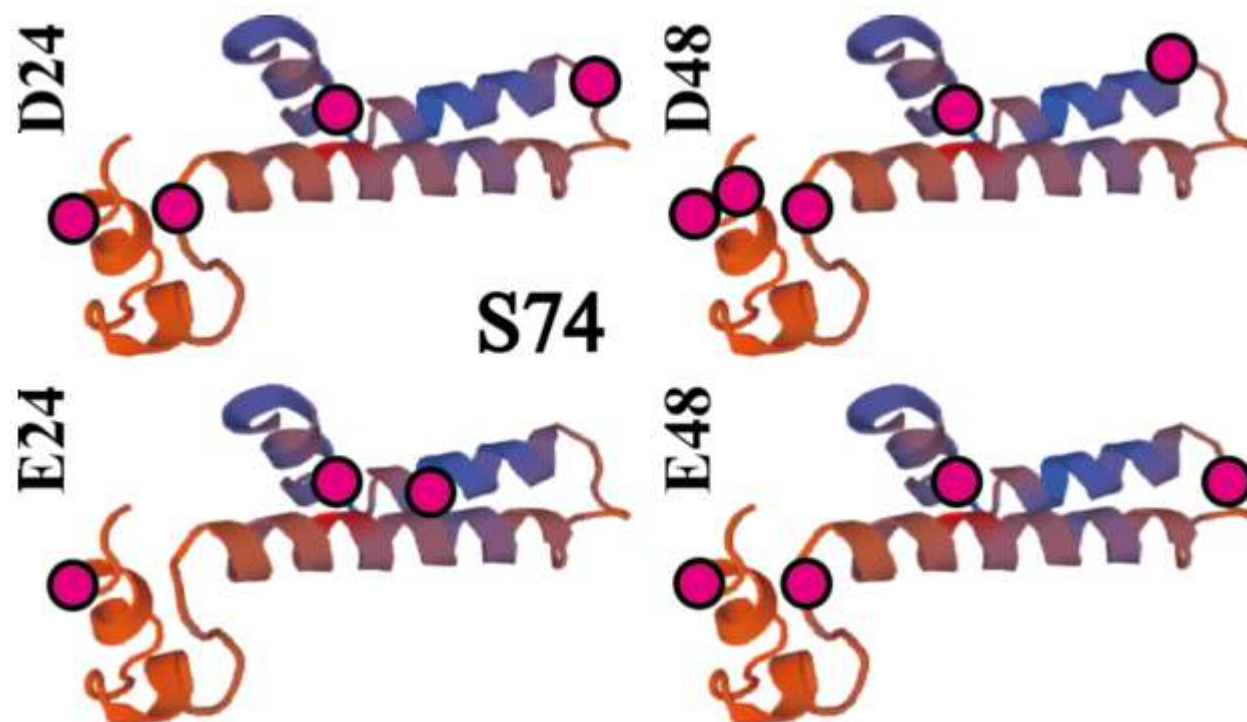
Changed pattern on DIGE gel:



Location in rubber genome: scaffold1222\_136753.mRNA1

Protein name: Rubber elongation factor protein/REF138

Predicted 3-D structure and phosphorylated amino acids:



Detail information for phosphorylation of amino acid sites:

D24: MAEDEDNQQQGQEGGLKYLGFVQDAATYAVTTFSNVYLFADKSGPLQPGVDIEGPVKNVAVPLYNRFSYIPNGA

E24: MAEDEDNQQQGQEGGLKYLGFVQDAATYAVTTFSNVYLFADKSGPLQPGVDIEGPVKNVAVPLYNRFSYIPNGA

D48: MAEDEDNQQQGQEGGLKYLGFVQDAATYAVTTFSNVYLFADKSGPLQPGVDIEGPVKNVAVPLYNRFSYIPNGA

E48: MAEDEDNQQQGQEGGLKYLGFVQDAATYAVTTFSNVYLFADKSGPLQPGVDIEGPVKNVAVPLYNRFSYIPNGA

D24: LKFVDSTVVASVTIIDRSLPPIVKDASIQVVS AIRAAPEAARSLASSLPGQT KILAKVIFYGEN

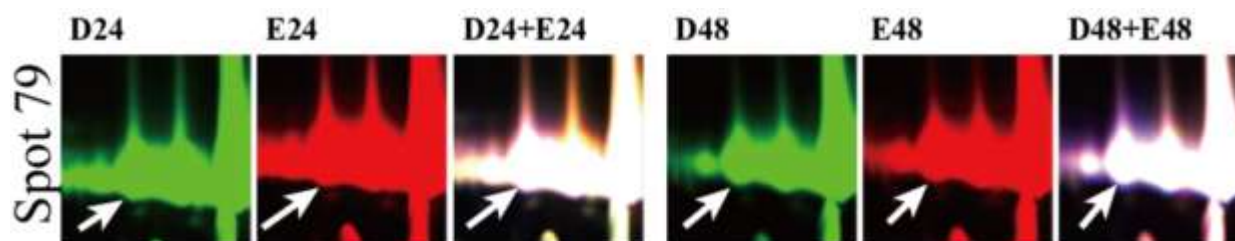
E24: LKFVDSTVVASVTIIDRSLPPIVKDASIQVVS AIRAAPEAARSLASSLPGQT KILAKVIFYGEN

D48: LKFVDSTVVASVTIIDRSLPPIVKDASIQVVS AIRAAPEAARSLASSLPGQT KILAKVIFYGEN

E48: LKFVDSTVVASVTIIDRSLPPIVKDASIQVVS AIRAAPEAARSLASSLPGQT KILAKVIFYGEN

Spot No. 79

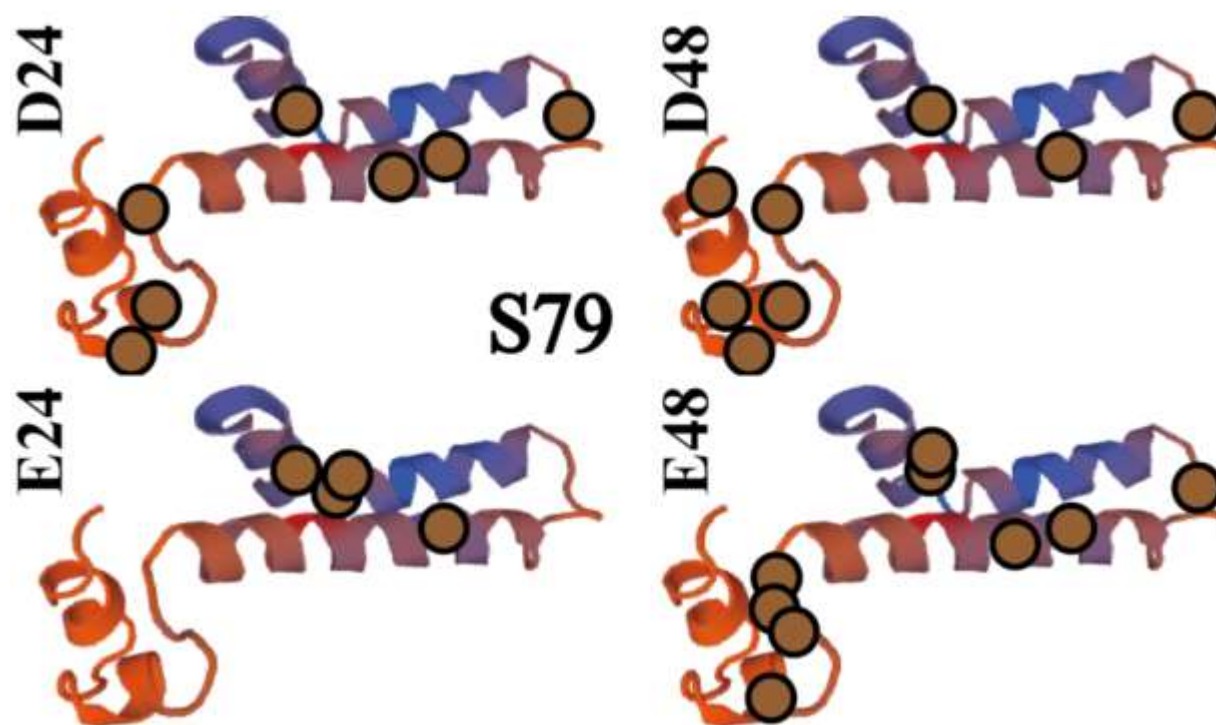
Changed pattern on DIGE gel:



Location in rubber genome: scaffold1222\_136753.mRNA1

Protein name: Rubber elongation factor protein/REF138

Predicted 3-D structure and phosphorylated amino acids:



Detail information for phosphorylation of amino acid sites:

D24: MAEDEDNQQGQGEGLKYLGFVQDAATYAVTTFSSNVYLFAKDKSGPLQPGVDIEGPVKNVAVPLYNRFSYIPNGA

E24: MAEDEDNQQGQGEGLKYLGFVQDAATYAVTTFSSNVYLFAKDKSGPLQPGVDIEGPVKNVAVPLYNRFSYIPNGA

D48: MAEDNQQGQGEGLKYLGFVQDAATYAVTTFSSNVYLFAKDKSGPLQPGVDIEGPVKNVAVPLYNRFSYIPNGA

E48: MAEDEDNQQGQGEGLKYLGFVQDAATYAVTTFSSNVYLFAKDKSGPLQPGVDIEGPVKNVAVPLYNRFSYIPNGA

D24: LKFVDSSTVVASVTIIDRSLPPIVKDASIQQVVSATRAAPEAARSLASSLPGGTKILAKVIFYGEN

E24: LKFVDSSTVVASVTIIDRSLPPIVKDASIQQVVSATRAAPEAARSLASSLPGGTKILAKVIFYGEN

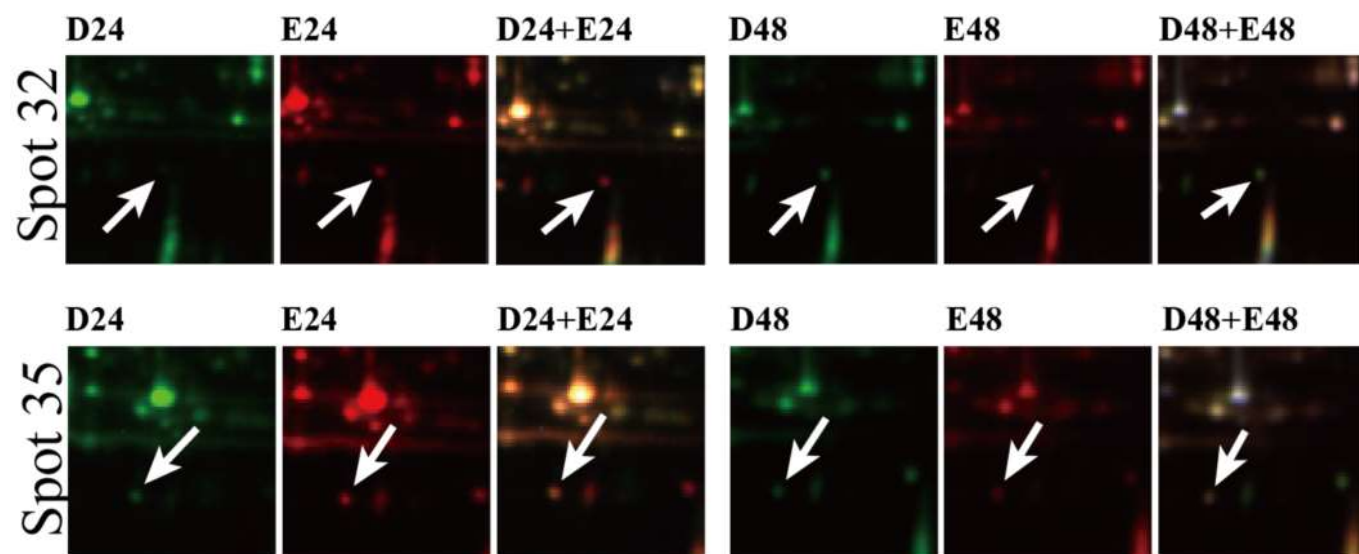
D48: LKFVDSSTVVASVTIIDRSLPPIVKDASIQQVVSATRAAPEAARSLASSLPGGTKILAKVIFYGEN

E48: LKFVDSSTVVASVTIIDRSLPPIVKDASIQQVVSATRAAPEAARSLASSLPGGTKILAKVIFYGEN



Protein name: [REF175](#)

Location of the [two](#) spots identified as [REF175](#) by MS from 2-D DIGE gels:

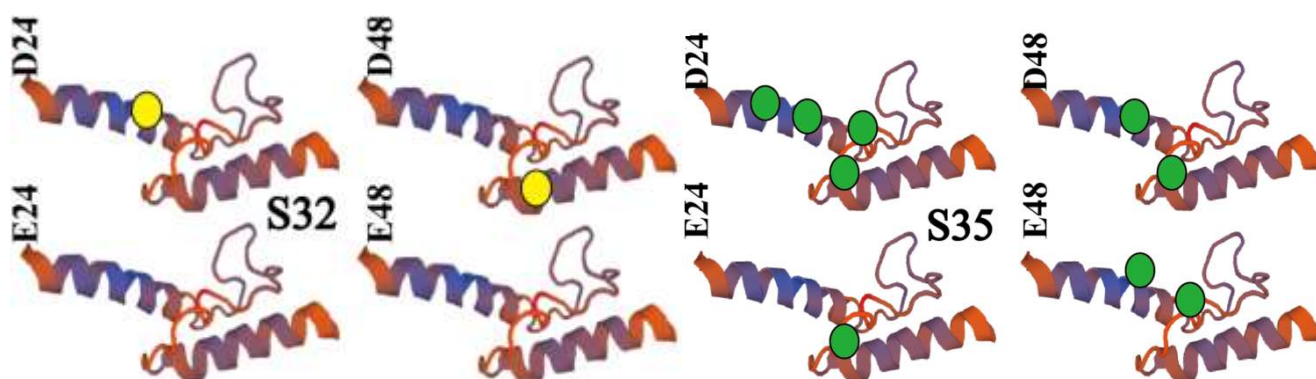


Detail information for phosphorylation of amino acid sites in [REF175](#):

### Spot 32 Spot 35

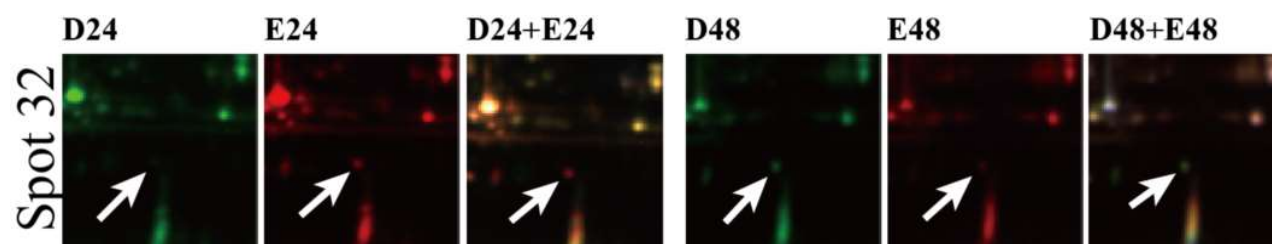
D24h	MAEGEEVNIOEEANKGEENPOEEANIOEETNKGEENIOEEANIOEEANKEEESLKYLDLFVQAATVYARASFSKLYLFAKDKS
E24h	MAEGEEVNIOEEANKGEENPOEEANIOEETNKGEENIOEEANIOEEANKEEESLKYLDLFVQAATVYARASFSKLYLFAKDKS
D48h	MAEGEEVNIOEEANKGEENPOEEANIOEETNKGEENIOEEANIOEEANKEEESLKYLDLFVQAATVYARASFSKLYLFAKDKS
E48h	MAEGEEVNIOEEANKGEENPOEEANIOEETNKGEENIOEEANIOEEANKEEESLKYLDLFVQAATVYARASFSKLYLFAKDKS
D24h	GPFKPGVNTVESRFKSVVRPVYNKFQVPVKNVLFADRRVDAYVTVLDRIVPPIVKRASIQAYSVAPGAARAVASYLPLHTKRL SKVLYGDG
E24h	GPFKPGVNTVESRFKSVVRPVYNKFQVPVKNVLFADRRVDAYVTVLDRIVPPIVKRASIQAYSVAPGAARAVASYLPLHTKRL SKVLYGDG
D48h	GPFKPGVNTVESRFKSVVRPVYNKFQVPVKNVLFADRRVDAYVTVLDRIVPPIVKRASIQAYSVAPGAARAVASYLPLHTKRL SKVLYGDG
E48h	GPFKPGVNTVESRFKSVVRPVYNKFQVPVKNVLFADRRVDAYVTVLDRIVPPIVKRASIQAYSVAPGAARAVASYLPLHTKRL SKVLYGDG

Predicted 3-D structure and phosphorylated amino acids in different [REF175](#) isoforms:



Spot No. 32

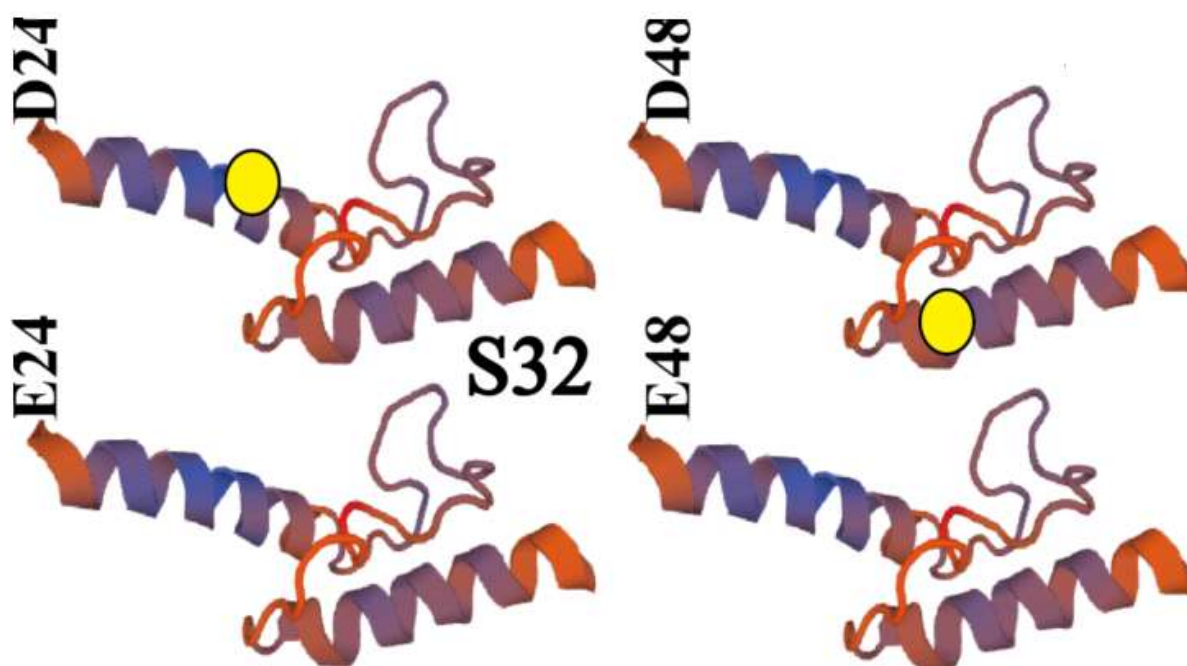
Changed pattern on DIGE gel:



Location in rubber genome: scaffold1222\_100110.mRNA1

Protein name: Rubber elongation factor protein/REF175

Predicted 3-D structure and phosphorylated amino acids:



Detail information for phosphorylation of amino acid sites:

D24: MAEGEEVNIIQEEANKGEENPQEEANIQEETNKGEENIQEEANIQEEANKEEESLKYLDFVQAATVYARASFSKL

E24: MAEGEEVNIIQEEANKGEENPQEEANIQEETNKGEENIQEEANIQEEANKEEESLKYLDFVQAATVYARASFSKL

D48: MAEGEEVNIIQEEANKGEENPQEEANIQEETNKGEENIQEEANIQEEANKEEESLKYLDFVQAATVYARASFSKL

E48: MAEGEEVNIIQEEANKGEENPQEEANIQEETNKGEENIQEEANIQEEANKEEESLKYLDFVQAATVYARASFSKL

D24: YLFAKDKSGPFKPGVNTVESRFKSVVRPVYNKFQVPVKNVLFADRRVDAYVTVLDRIVPPIVKRASIQAYSVAP

E24: YLFAKDKSGPFKPGVNTVESRFKSVVRPVYNKFQVPVKNVLFADRRVDAYVTVLDRIVPPIVKRASIQAYSVAP

D48: YLFAKDKSGPFKPGVNTVESRFKSVVRPVYNKFQVPVKNVLFADRRVDAYVTVLDRIVPPIVKRASIQAYSAP

E48: YLFAKDKSGPFKPGVNTVESRFKSVVRPVYNKFQVPVKNVLFADRRVDAYVTVLDRIVPPIVKRASIQAYSVAP

D24: GAARAVASYLPLHTKRLSKVLYGDG

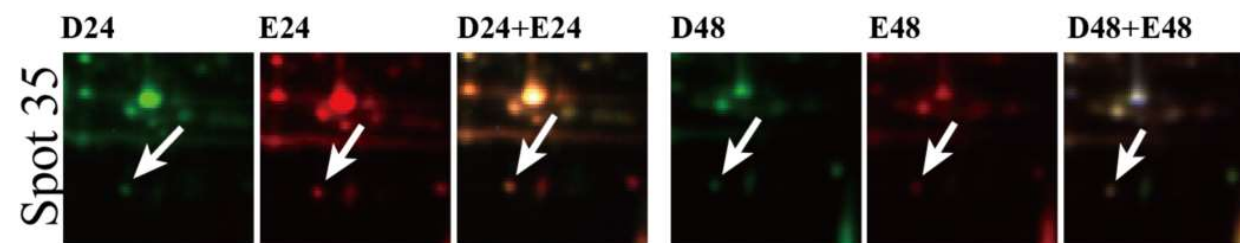
E24: GAARAVASYLPLHTKRLSKVLYGDG

D48: GAARAVASYLPLHTKRLSKVLYGDG

E48: GAARAVASYLPLHTKRLSKVLYGDG

Spot No. 35

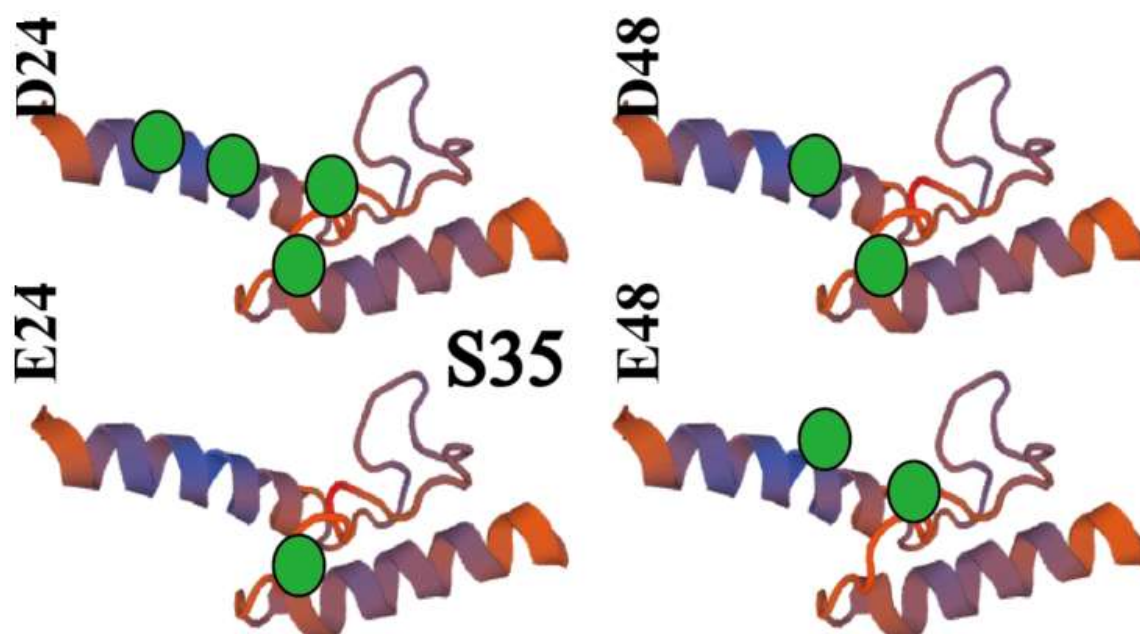
Changed pattern on DIGE gel:



Location in rubber genome: scaffold1222\_100110.mRNA1

Protein name: Rubber elongation factor protein/REF175

Predicted 3-D structure and phosphorylated amino acids:



Detail information for phosphorylation of amino acid sites:

D24: MAEGEEVN IQEEANKGEENPQEEANIQEETNKGEENIQEEANIQEEANKEEESLKYLD FVQAATVYARASF SKL

E24: MAEGEEVN IQEEANKGEENPQEEANIQEETNKGEENIQEEANIQEEANKEEESLKYLD FVQAATVYARASF SKL

D48: MAEGEEVN IQEEANKGEENPQEEANIQEETNKGEENIQEEANIQEEANKEEESLKYLD FVQAATVYARASF SKL

E48: MAEGEEVN IQEEANKGEENPQEEANIQEETNKGEENIQEEANIQEEANKEEESLKYLD FVQAATVYARASF SKL

D24: YLFAKDKSGPFPKPGVNTVESRFKSVVRPVYNKFQVPVKNVLFADRRVDAYVTVLDRIVPPIVKRASIQAYSVAP

E24: YLFAKDKSGPFPKPGVNTVESRFKSVVRPVYNKFQVPVKNVLFADRRVDAYVTVLDRIVPPIVKRASIQAYSVAP

D48: YLFAKDKSGPFPKPGVNTVESRFKSVVRPVYNKFQVPVKNVLFADRRVDAYVTVLDRIVPPIVKRASIQAYSVAP

E48: YLFAKDKSGPFPKPGVNTVESRFKSVVRPVYNKFQVPVKNVLFADRRVDAYVTVLDRIVPPIVKRASIQAYSVAP

D24: GAARAVASYLPLHTKRLSKVLYGDG

E24: GAARAVASYLPLHTKRLSKVLYGDG

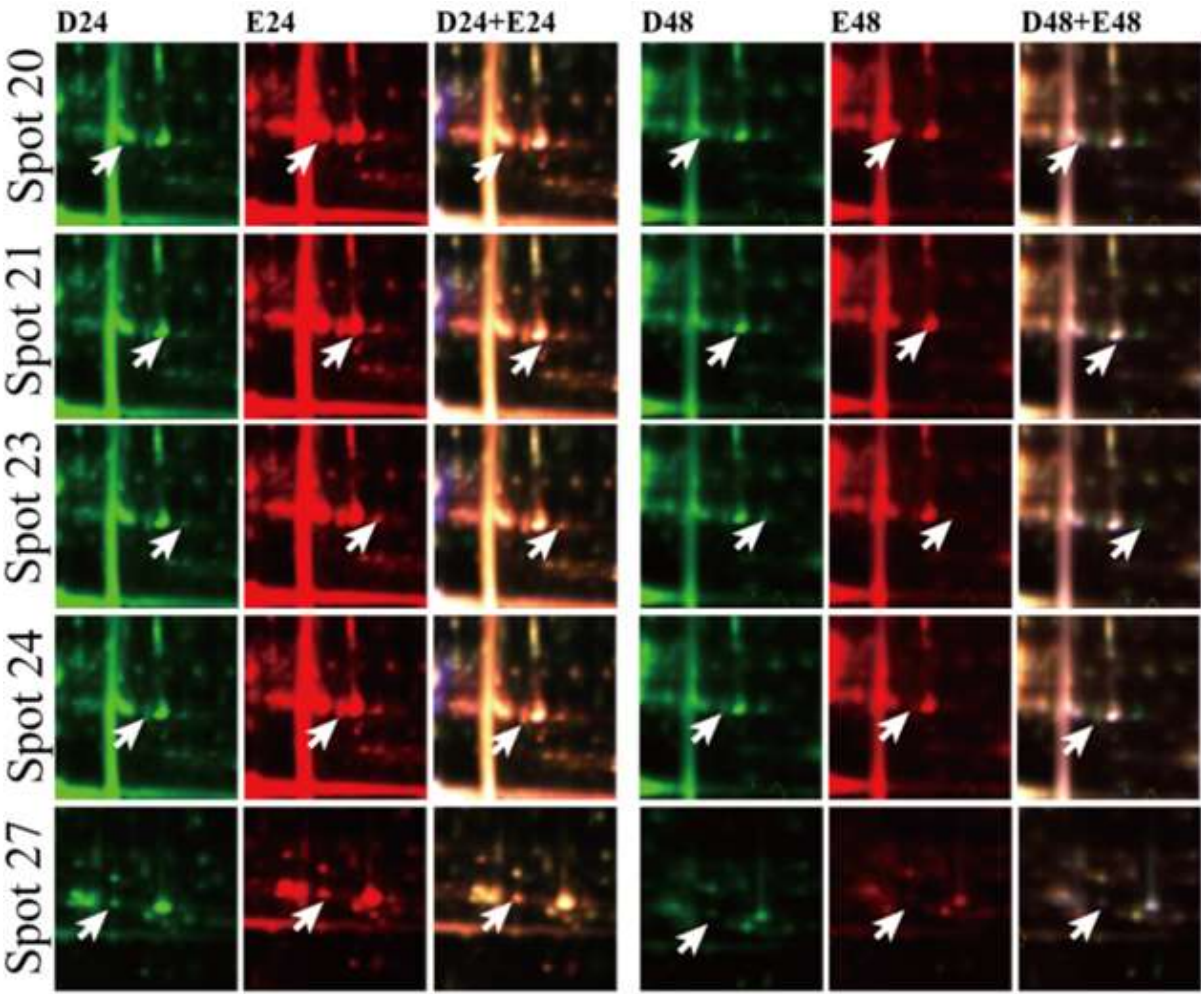
D48: GAARAVASYLPLHTKRLSKVLYGDG

E48: GAARAVASYLPLHTKRLSKVLYGDG



Protein name: [REF258](#)

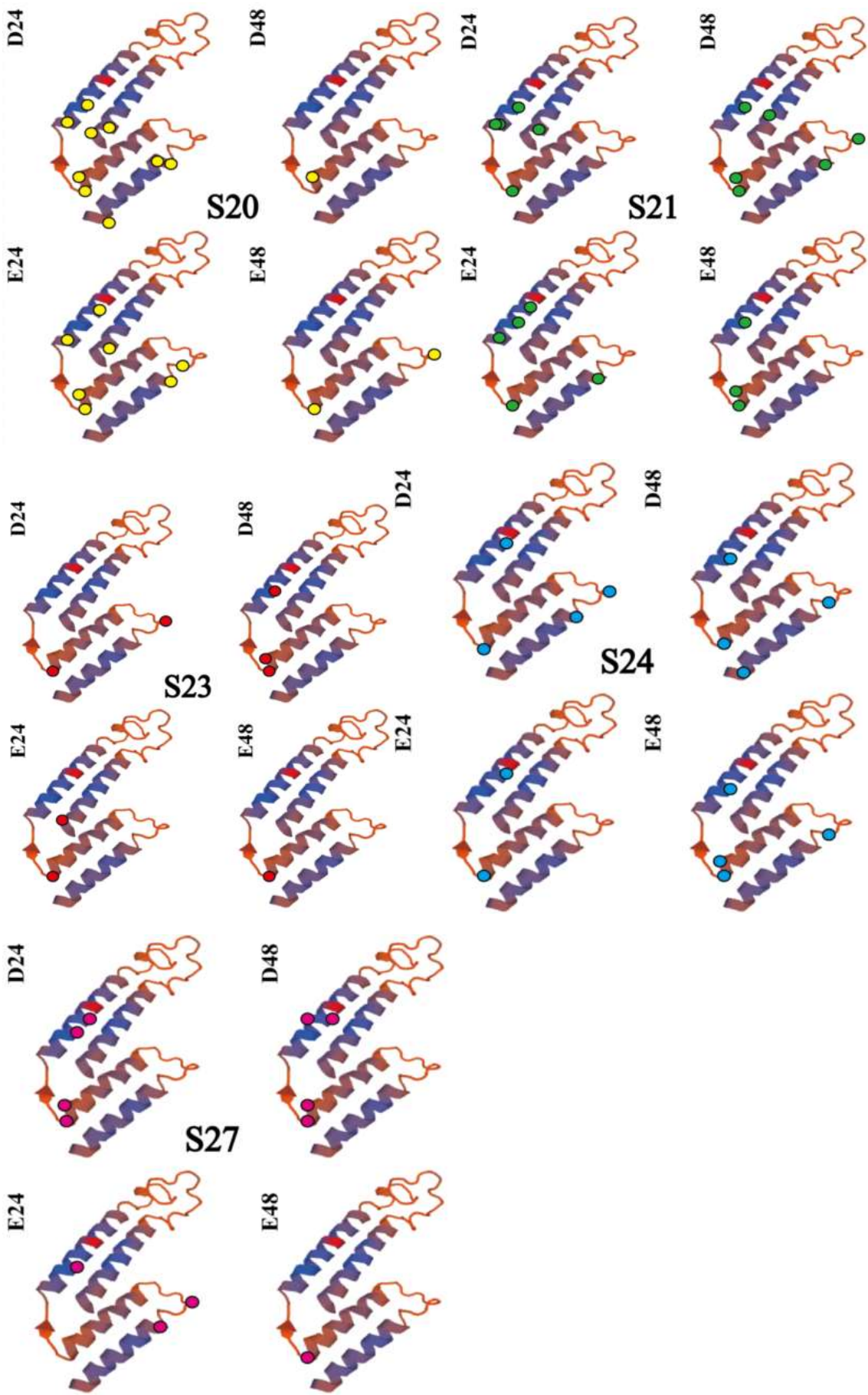
Location of the [five](#) spots identified as [REF258](#) by MS from 2-D DIGE gels:



Detail information for phosphorylation of amino acid sites in [REF258](#):

	Spot 20	Spot 21	Spot 23	Spot 24	Spot 27	Share
D24h	MASLLGAASNVINAASNVVEEAVKGVENAQQEVANAVSNPSNIVKDVASAA	DIVEEAAKGVENVQKEVANAVSNSSNIVKDVASAA	DIVEEAAKVVVDNVQQGVV	SAASNVVEEAAKGVGNQEKVDDEEED		
E24h	MASLLGAASNVINAASNVVEEAVKGVENAQQEVANAVSNPSNIVKDVASAA	DIVEEAAKGVENVQKEVANAVSNSSNIVKDVASAATDIVEEAAKVVVDNVQQGVV	SAASNVVEEAAKGVGNQEKVDDEEED			
D48h	MASLLGAASNVINAASNVVEEAVKGVENAQQEVANAVSNPSNIVKDVASAAT	DIVEEAAKGVENVQKEVANAVSNSSNIVKDVASAATDIVEEAAKVVVDNVQQGVV	SAASNVVEEAAKGVGNQEKVDDEEED			
E48h	MASLLGAASNVINAASNVVEEAVKGVENAQQEVANAVSNPSNIVKDVASAAT	DIVEEAAKGVENVQKEVANAVSNSSNIVKDVASAATDIVEEAAKVVVDNVQQGVV	SAASNVVEEAAKGVGNQEKVDDEEED			
D24h	DEEJ TLKYLDIVQAALVLALVSSSKLYLFVKDKSGPLKPGVD	AEVTIKSVVRPFYRFDVDPNKVLKFADNQVDASVTLVLRYPVVKQVSTRAYSVARNAPRAALALVSYLPLPTNRLCKLLSEDK				
E24h	DEEJ TLKYLDIVQAALVLALVSSSKLYLFVKDKSGPLKPGVD	AEVTIKSVVRPFYRFDVDPNKVLKFADNQVDASVTLVLRYPVVKQVSTRAYSVARNAPRAALALVSYLPLPTNRLCKLLSEDK				
D48h	DEEJ TLKYLDIVQAALVLALVSSSKLYLFVKDKSGPLKPGVD	AEVTIKSVVRPFYRFDVDPNKVLKFADNQVDASVTLVLRYPVVKQVSTRAYSVARNAPRAALALVSYLPLPTNRLCKLLSEDK				
E48h	DEEJ TLKYLDIVQAALVLALVSSSKLYLFVKDKSGPLKPGVD	AEVTIKSVVRPFYRFDVDPNKVLKFADNQVDASVTLVLRYPVVKQVSTRAYSVARNAPRAALALVSYLPLPTNRLCKLLSEDK				

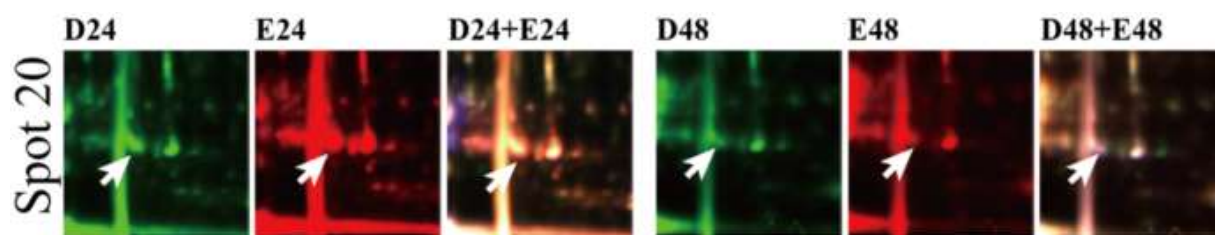
Predicted 3-D structure and phosphorylated amino acids in different [REF258](#) isoforms:





## Spot No. 20

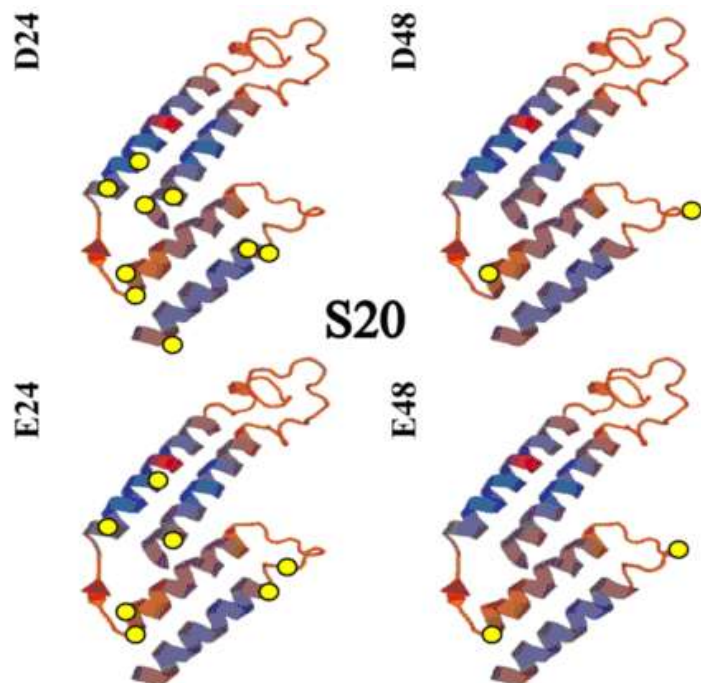
Changed pattern on DIGE gel:



**Location in rubber genome:** scaffold1222\_175215.mRNA1

**Protein name:** Rubber elongation factor protein/REF258

**Predicted 3-D structure and phosphorylated amino acids:**



**Detail information for phosphorylation of amino acid sites:**

D24: MASLLGAASNVINAASNVEEAVKGVENAQQEVANAVSNPSNIVKDVASAATDIVEEAAKGVENVQKEVANAVSN

E24: MASLLGAASNVAASNVEEAVKGVENAQQEVANAVSNPSNIVKDVASAATDIVEEAAKGVENVQKEVANAVSN

D48: MASLLGAASNVAASNVEEAVKGVENAQQEVANAVSNPSNIVKDVASAATDIVEEAAKGVENVQKEVANAVSN

E48: MASLLGAASNVAASNVEEAVKGVENAQQEVANAVSNPSNIVKDVASAATDIVEEAAKGVENVQKEVANAVSN

D24: SSNIVKDVASAATDIVEEAAKVVDNVQQGVVSAASNVEEAAKGVGNIQEKVDDEEEDTLKYLDIVQAALVLALV

E24: SSNIVKDVASAATDIVEEAAKVVDNVQQGVVSAASNVEEAAKGVGNIQEKVDDEEEDTLKYLDIVQAALVLALV

D48: SSNIVKDVASAATDIVEEAAKVVDNVQQGVVSAASNVEEAAKGVGNIQEKVDDEEEDTLKYLDIVQAALVLALV

E48: SSNIVKDVASAATDIVEEAAKVVDNVQQGVVSAASNVEEAAKGVGNIQEKVDDEEEDTLKYLDIVQAALVLALV

D24: SSSKLYLFVKDKSGPLKPGVDTAEVTIKSVVRPFYRFHDPNPKVLKFADNQVDASVTLVLRYPVVKQVSTRA

E24: SSSKLYLFVKDKSGPLKPGVDTAEVTIKSVVRPFYRFHDPNPKVLKFADNQVDASVTLVLRYPVVKQVSTRA

D48: SSSKLYLFVKDKSGPLKPGVDTAEVTIKSVVRPFYRFHDPNPKVLKFADNQVDASVTLVLRYPVVKQVSTRA

E48: SSSKLYLFVKDKSGPLKPGVDTAEVTIKSVVRPFYRFHDPNPKVLKFADNQVDASVTLVLRYPVVKQVSTRA

D24: YSVARNAPRAALALVSYLPLPTNRLCKLLSEDK

E24: YSVARNAPRAALALVSYLPLPTNRLCKLLSEDK

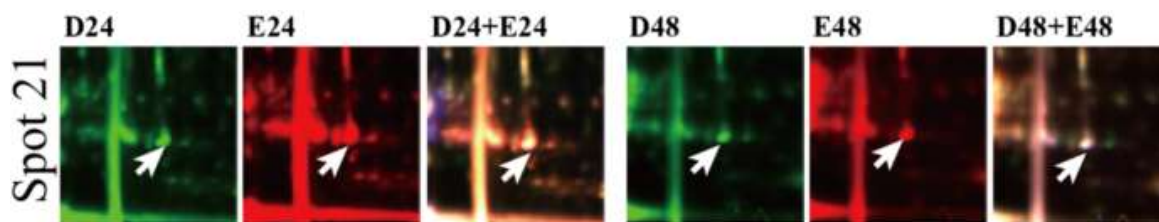
D48: YSVARNAPRAALALVSYLPLPTNRLCKLLSEDK

E48: YSVARNAPRAALALVSYLPLPTNRLCKLLSEDK



## Spot No. 21

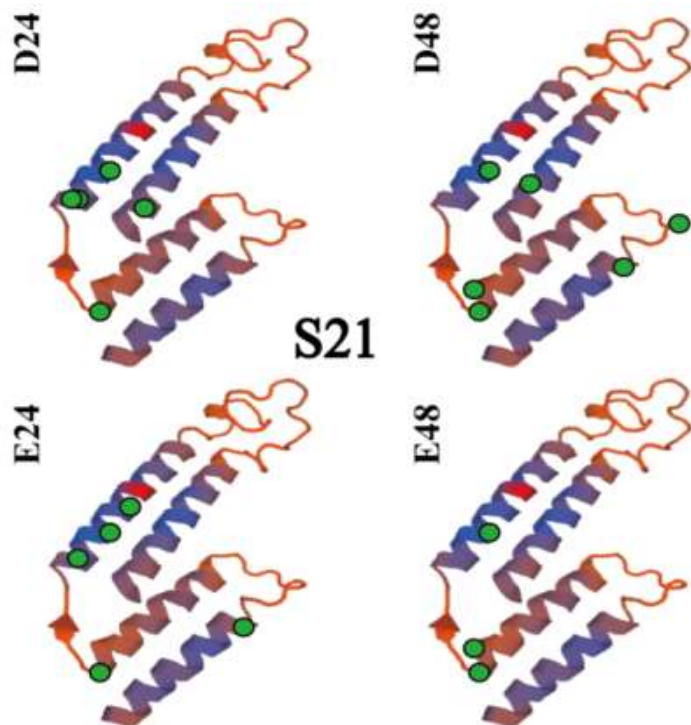
Changed pattern on DIGE gel:



**Location in rubber genome:** scaffold1222\_175215.mRNA1

**Protein name:** Rubber elongation factor protein/REF258

**Predicted 3-D structure and phosphorylated amino acids:**

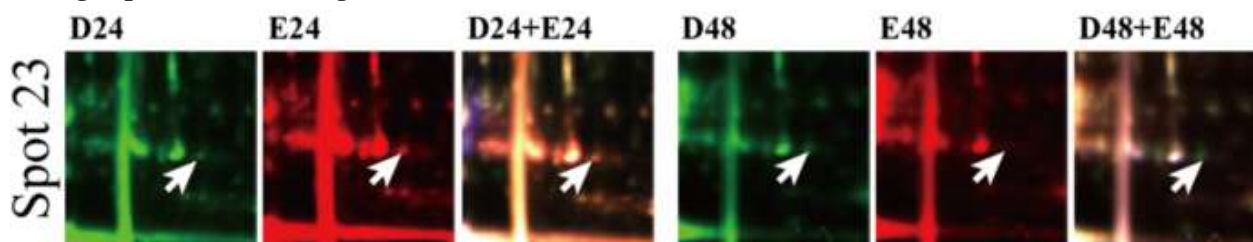


Detail information for phosphorylation of amino acid sites:

D24: MASLLGAASNVINAASNVEEAVKGVENAQQEVANAVSNPSNIVKDVASAATDIVEEAAKGVENVQKEVANAVSN  
**E24:** MASLLGAASNVINAASNVEEAVKGVENAQQEVANAVSNP**S**NIVKDVASAATDIVEEAAKGVENVQKEVANAVSN  
D48: MASLLGAASNVINAASNVEEAVKGVENAQQEVANAVSNP**S**NIVKDVASAAT**T**DIVEEAAKGVENVQKEVANAVSN  
**E48:** MASLLGAASNVINAASNVEEAVKGVENAQQEVANAVSNPSNIVKDVASAATDIVEEAAKGVENVQKEVANAVSN  
D24: SSNIVKDVASAATDIVEEAAKVVDNVQQGVVSAAS**S**NVVEEAAKGVGNIQEKVDDEEEDTLKYLDIVQAALVLALV  
**E24:** SSNIVKDVASAATDIVEEAAKVVDNVQQGVVSAAS**S**NVVEEAAKGVGNIQEKVDDEEEDTLKYLDIVQAALVLALV  
D48: SSNIVKDVASAATDIVEEAAKVVDNVQQGVV**S**AA**S**NVVEEAAKGVGNIQEKVDDEEEDTLKYLDIVQAALVLALV  
**E48:** SSNIVKDVASAATDIVEEAAKVVDNVQQGVV**S**AA**S**NVVEEAAKGVGNIQEKVDDEEEDTLKYLDIVQAALVLALV  
D24: **S****S**KLFLFKDK**S**GPLKPGVDTAEVTIKSVVRPFYRFHDPNPKVLKFADNQVDASVTLVRLRYAPPVVKQVSTRA  
**E24:** **S****S**KLFLFKDK**S**GPLKPGVD**T**AEVTIKSVVRPFYRFHDPNPKVLKFADNQVDASVTLVRLRYAPPVVKQVSTRA  
D48: **S****S**KLFLFKDK**S**GPLKPGVDTAEVTIKSVVRPFYRFHDPNPKVLKFADNQVDASVTLVRLRYAPPVVKQVSTRA  
**E48:** **S****S**KLFLFKDK**S**GPLKPGVDTAEVTIKSVVRPFYRFHDPNPKVLKFADNQVDASVTLVRLRYAPPVVKQVSTRA  
D24: YSVARNAPRAALALVSYLPLP**T**NRLCKLLSEDK  
**E24:** YSVARNAPRAALALVSYLPLPTNRLCKLLSEDK  
D48: YSVARNAPRAALALV**S**YLPLPTNRLCKLLSEDK  
**E48:** YSVARNAPRAALALVSYLPLPTNRLCKLLSEDK

## Spot No. 23

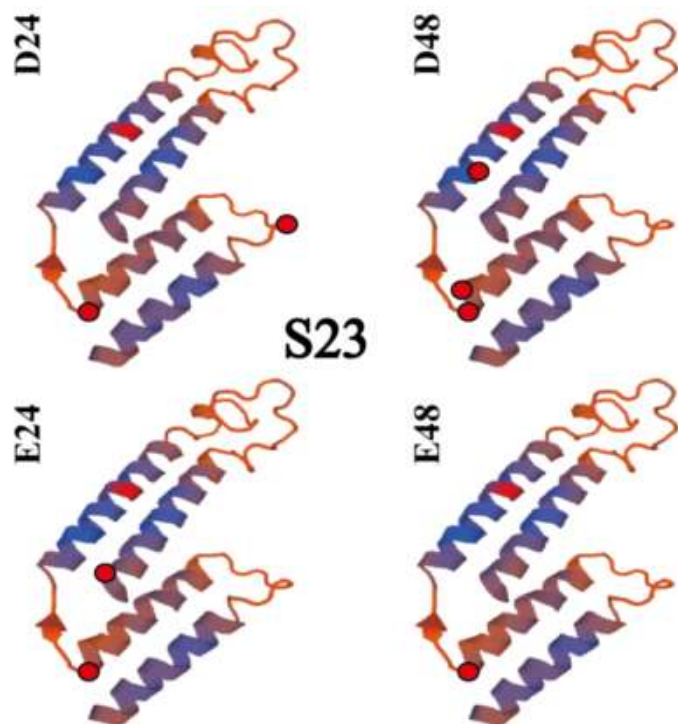
Changed pattern on DIGE gel:



**Location in rubber genome:** scaffold1222\_175215.mRNA1

**Protein name:** Rubber elongation factor protein/REF258

**Predicted 3-D structure and phosphorylated amino acids:**

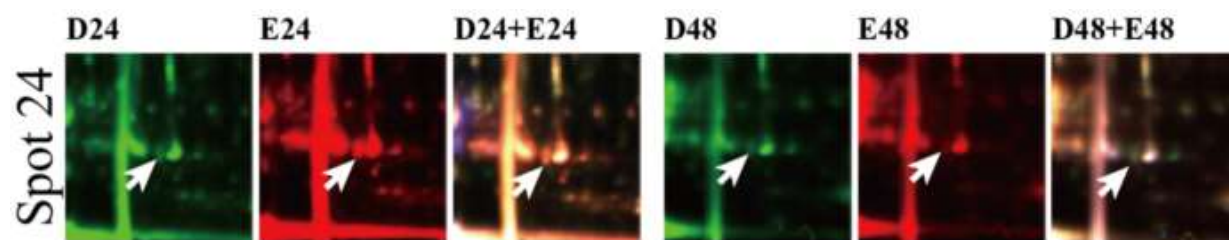


**Detail information for phosphorylation of amino acid sites:**

D24: MASLLGAASNVINAASNVVEEAVKGVENAQQEVANAVSNPSNIVKDVASAATDIVEEAAKGVENVQKEVANAVSN  
E24: MASLLGAASNVINAASNVVEEAVKGVENAQQEVANAVSNPSNIVKDVASAATDIVEEAAKGVENVQKEVANAVSN  
D48: MASLLGAASNVINAASNVVEEAVKGVENAQQEVANAVSNPSNIVKDVASAATDIVEEAAKGVENVQKEVANAVSN  
E48: MASLLGAASNVINAASNVVEEAVKGVENAQQEVANAVSNPSNIVKDVASAATDIVEEAAKGVENVQKEVANAVSN  
D24: SSNIVKDVASAATDIVEEAAKVVDNVQQGVVSAASNVVEEAAKGVGNIQEKVDDEEEDTLKYLDIVQAALVLALV  
E24: SSNIVKDVASAATDIVEEAAKVVDNVQQGVVSAASNVVEEAAKGVGNIQEKVDDEEEDTLKYLDIVQAALVLALV  
D48: SSNIVKDVASAATDIVEEAAKVVDNVQQGVVSAASNVVEEAAKGVGNIQEKVDDEEEDTLKYLDIVQAALVLALV  
E48: SSNIVKDVASAATDIVEEAAKVVDNVQQGVVSAASNVVEEAAKGVGNIQEKVDDEEEDTLKYLDIVQAALVLALV  
D24: SSSKLYLFVKDKSGPLKPGVDTAEVTIKSVVRPFYFRHDPNPKVLKFADNQVDASVTLVLRYPVVKQVSTRA  
E24: SSSKLYLFVKDKSGPLKPGVDTAEVTIKSVVRPFYFRHDPNPKVLKFADNQVDASVTLVLRYPVVKQVSTRA  
D48: SSSKLYLFVKDKSGPLKPGVDTAEVTIKSVVRPFYFRHDPNPKVLKFADNQVDASVTLVLRYPVVKQVSTRA  
E48: SSSKLYLFVKDKSGPLKPGVDTAEVTIKSVVRPFYFRHDPNPKVLKFADNQVDASVTLVLRYPVVKQVSTRA  
D24: YSVARNAPRAALALVSYLPLPTNRLCKLLSEDK  
E24: YSVARNAPRAALALVSYLPLPTNRLCKLLSEDK  
D48: YSVARNAPRAALALVSYLPLPTNRLCKLLSEDK  
E48: YSVARNAPRAALALVSYLPLPTNRLCKLLSEDK

## Spot No. 24

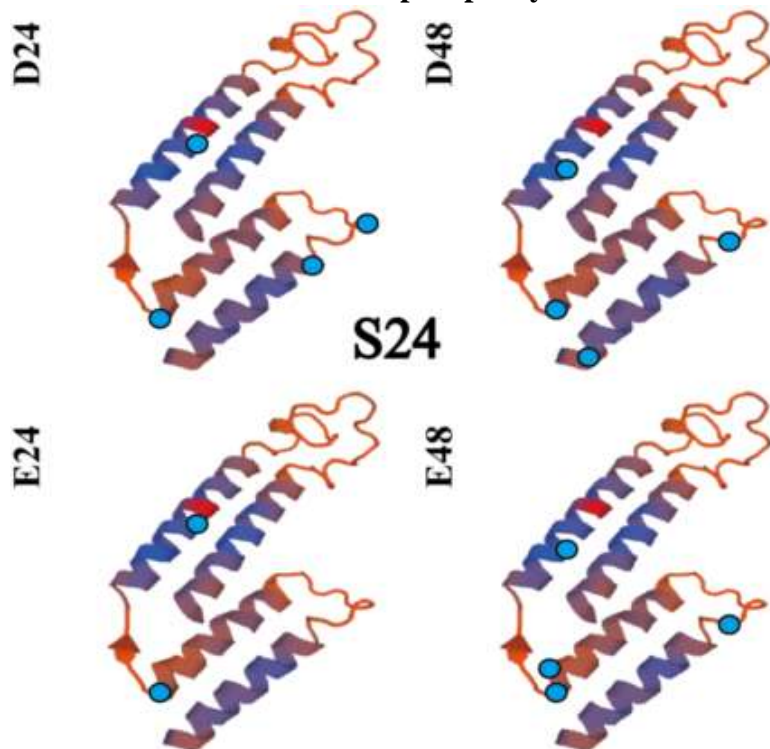
Changed pattern on DIGE gel:



**Location in rubber genome:** scaffold1222\_175215.mRNA1

**Protein name:** Rubber elongation factor protein/REF258

**Predicted 3-D structure and phosphorylated amino acids:**



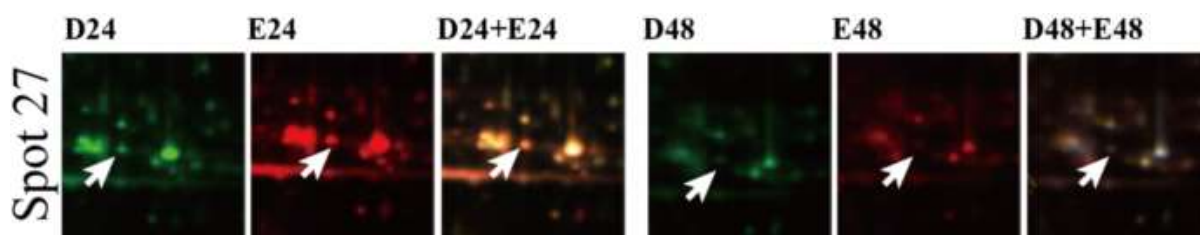
**Detail information for phosphorylation of amino acid sites:**

D24: MASLLGAASNVINAASNVEEAVKGVENAQQEVANAVSNPSNIVKDVASAATDIVEEAAKGVENVQKEVANAVSN  
E24: MASLLGAASNVINAASNVEEAVKGVENAQQEVANAVSNPSNIVKDVASAATDIVEEAAKGVENVQKEVANAVSN  
D48: MASLLGAASNVINAASNVEEAVKGVENAQQEVANAVSNPSNIVKDVASAATDIVEEAAKGVENVQKEVANAVSN  
E48: MASLLGAASNVINAASNVEEAVKGVENAQQEVANAVSNPSNIVKDVASAATDIVEEAAKGVENVQKEVANAVSN  
D24: SSNIVKDVASAATDIVEEAAKVVDNVQQGVVSAASSNVVEEAAKGVGNIQEKVDDEEEDTLKYLDIVQAALVLALV  
E24: SSNIVKDVASAATDIVEEAAKVVDNVQQGVVSAASSNVVEEAAKGVGNIQEKVDDEEEDTLKYLDIVQAALVLALV  
D48: SSNIVKDVASAATDIVEEAAKVVDNVQQGVVSAASSNVVEEAAKGVGNIQEKVDDEEEDTLKYLDIVQAALVLALV  
E48: SSNIVKDVASAATDIVEEAAKVVDNVQQGVVSAASSNVVEEAAKGVGNIQEKVDDEEEDTLKYLDIVQAALVLALV  
D24: SSSKLYLFVKDKSGPLKPGVDTAEVTIKSVVRPFYFRHDPNPKVLKFADNQVDASVTLVRLRYAPPVVKQVSTRA  
E24: SSSKLYLFVKDKSGPLKPGVDTAEVTIKSVVRPFYFRHDPNPKVLKFADNQVDASVTLVRLRYAPPVVKQVSTRA  
D48: SSSKLYLFVKDKSGPLKPGVDTAEVTIKSVVRPFYFRHDPNPKVLKFADNQVDASVTLVRLRYAPPVVKQVSTRA  
E48: SSSKLYLFVKDKSGPLKPGVDTAEVTIKSVVRPFYFRHDPNPKVLKFADNQVDASVTLVRLRYAPPVVKQVSTRA  
D24: YSVARNAPRAALALVSYLPLPTNRLCKLLSEDK  
E24: YSVARNAPRAALALVSYLPLPTNRLCKLLSEDK  
D48: YSVARNAPRAALALVSYLPLPTNRLCKLLSEDK  
E48: YSVARNAPRAALALVSYLPLPTNRLCKLLSEDK



Spot No. 27

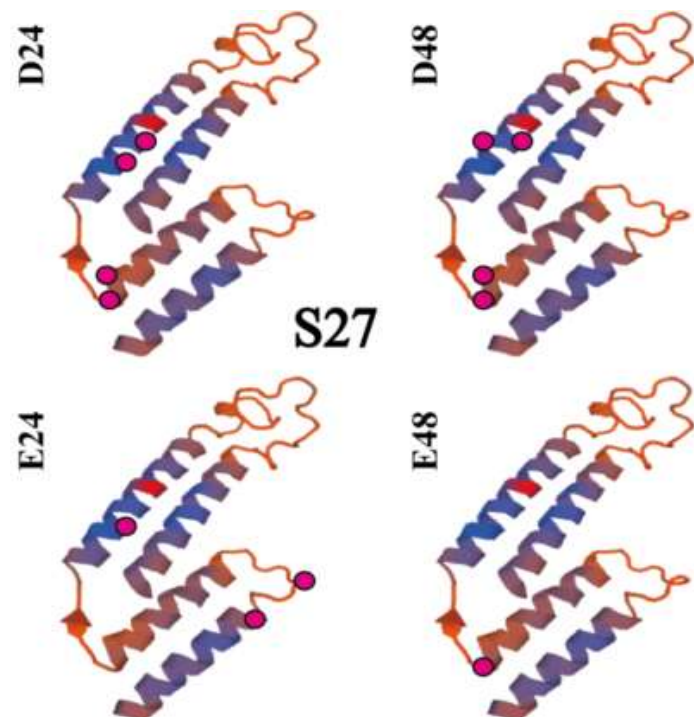
Changed pattern on DIGE gel:



Location in rubber genome: scaffold1222\_175215.mRNA1

Protein name: Rubber elongation factor protein/REF258

Predicted 3-D structure and phosphorylated amino acids:



Detail information for phosphorylation of amino acid sites:

D24: MASLLGAASNVINAASNVEEAVKGVENAQQEVANAVSNPSNIVKDVASAATDIVEEAAKGVENVQKEVANAVSN

E24: MASLLGAASNVINAASNVEEAVKGVENAQQEVANAVSNPSNIVKDVASAATTDIVEEAAKGVENVQKEVANAVSN

D48: MASLLGAASNVINAASNVEEAVKGVENAQQEVANAVSNPSNIVKDVASAATDIVEEAAKGVENVQKEVANAVSN

E48: MASLLGAASNVINAASNVEEAVKGVENAQQEVANAVSNPSNIVKDVASAATDIVEEAAKGVENVQKEVANAVSN

D24: SSNIVKDVASAATDIVEEAAKVVDNVQQGVVSASNVVEEAAKGVGNIQEKVDDEEEDTLKYLDIVQAALVLALV

E24: SSNIVKDVASAATDIVEEAAKVVDNVQQGVVSAASNVEEAAKGVGNIQEKVDDEEEDTLKYLDIVQAALVLALV

D48: SSNIVKDVASAATDIVEEAAKVVDNVQQGVVSASNVVEEAAKGVGNIQEKVDDEEEDTLKYLDIVQAALVLALV

E48: SSNIVKDVASAATDIVEEAAKVVDNVQQGVVSASNVVEEAAKGVGNIQEKVDDEEEDTLKYLDIVQAALVLALV

D24: SSSKLYLFVKDKSGPLKPGVDTAEVTIKSVVRPFYRFHDPNPKVLKFADNQVDASVTLVLRYPVVKQVSTRA

E24: SSSKLYLFVKDKSGPLKPGVDTAEVTIKSVVRPFYRFHDPNPKVLKFADNQVDASVTLVLRYPVVKQVSTRA

D48: SSSKLYLFVKDKSGPLKPGVDTAEVTIKSVVRPFYRFHDPNPKVLKFADNQVDASVTLVLRYPVVKQVSTRA

E48: SSSKLYLFVKDKSGPLKPGVDTAEVTIKSVVRPFYRFHDPNPKVLKFADNQVDASVTLVLRYPVVKQVSTRA

D24: YSVARNAPRAALALVSYLPLPTNRLCKLLSEDK

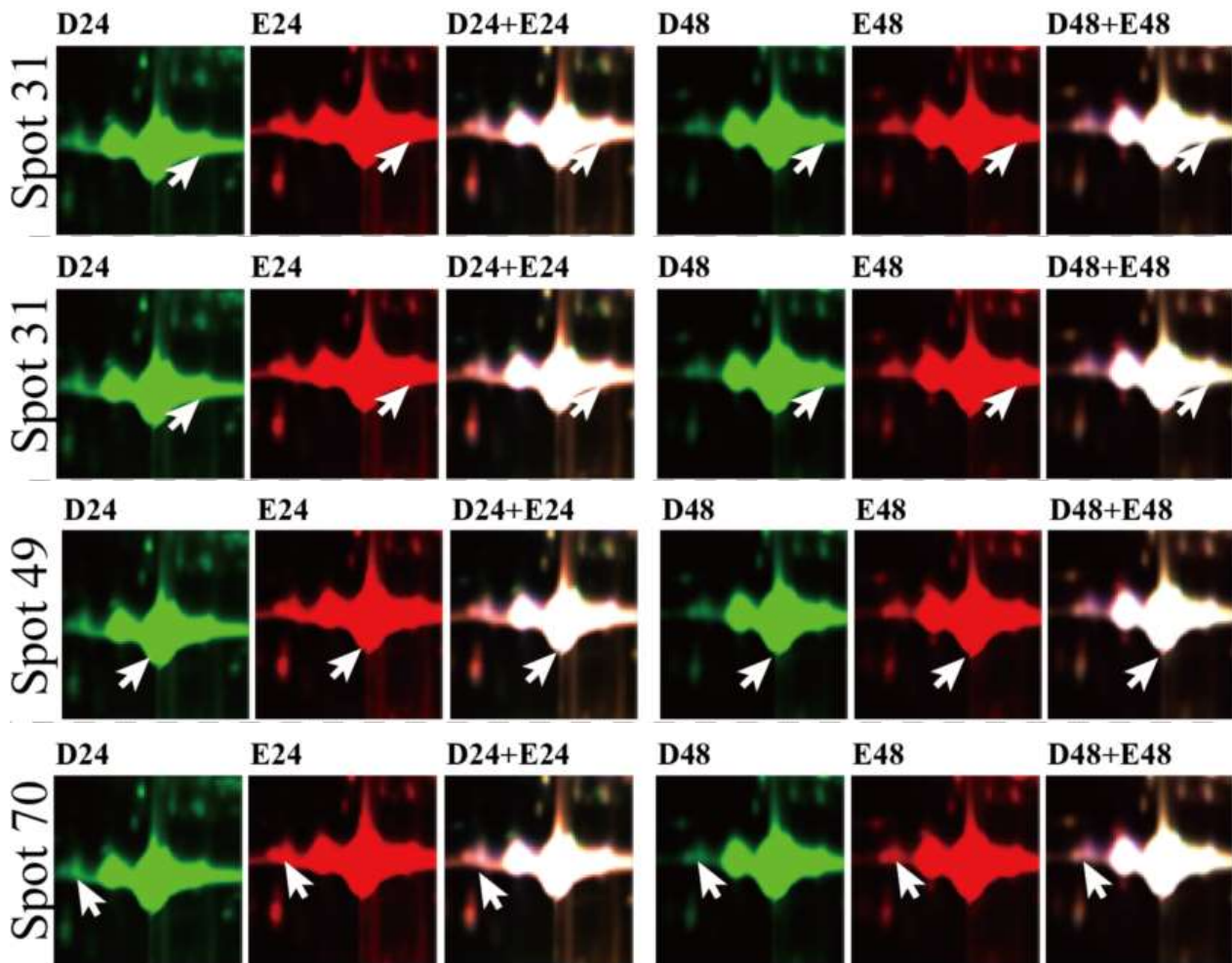
E24: YSVARNAPRAALALVSYLPLPTNRLCKLLSEDK

D48: YSVARNAPRAALALVSYLPLPTNRLCKLLSEDK

E48: YSVARNAPRAALALVSYLPLPTNRLCKLLSEDK

# Protein name: [SRPP204](#)

Location of the [three](#) spots identified as [SRPP204](#) by MS from 2-D DIGE gels:

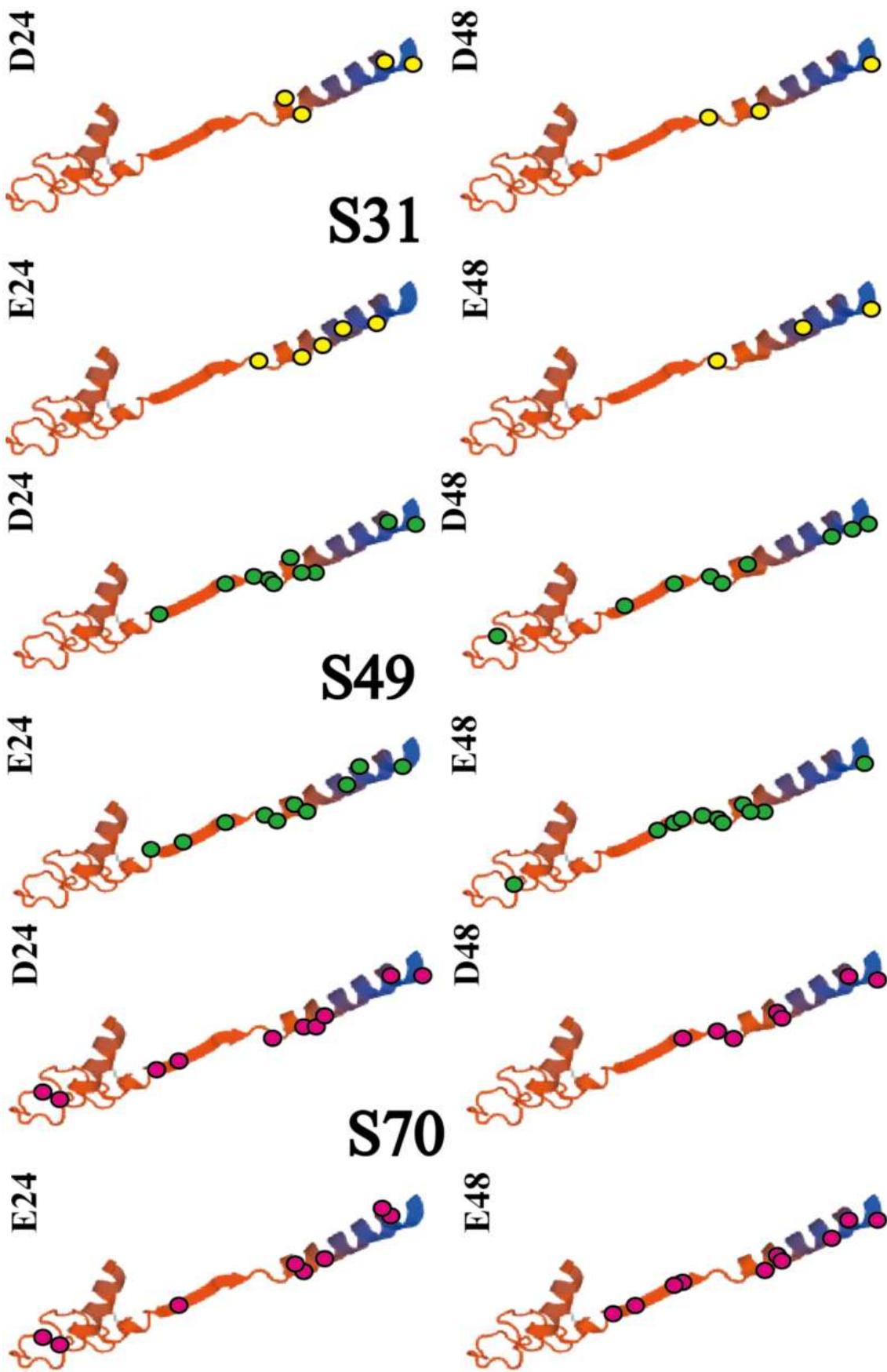


Detail information for phosphorylation of amino acid sites in [SRPP204](#):

**Spot 31** **Spot 49** **Spot 70** **Share**

D24h	MAEEVEERLKYLDVFRAAGVYAVD	S	F	T	L	Y	A	K	D	I	S	G	P	L	K	P	G	V	D	I	E	N	V	K	T	V	I	P	V	Y	I	P	L	E	A	V	K	F	V	D	K	I	V	D	V	S	I	L	D	G	V	V	P	P	V	I	K	Q	V	S	A	Q	T	Y	S	V	A	Q	D	A	P																	
E24h	MAEEVEERLKYLDVFRAAGVYAVD	S	F	T	L	Y	A	K	D	I	S	G	P	L	K	P	G	V	D	I	E	N	V	K	T	V	I	P	V	Y	I	P	L	E	A	V	K	F	V	D	K	I	V	D	V	S	I	L	D	G	V	V	P	P	V	I	K	Q	V	S	A	Q	T	Y	S	V	A	Q	D	A	P																	
D48h	MAEEVEERLKYLDVFRAAGVYAVD	S	F	T	L	Y	A	K	D	I	S	G	P	L	K	P	G	V	D	I	E	N	V	K	T	V	I	P	V	Y	I	P	L	E	A	V	K	F	V	D	K	I	V	D	V	S	I	L	D	G	V	V	P	P	V	I	K	Q	V	S	A	Q	T	Y	S	V	A	Q	D	A	P																	
E48h	MAEEVEERLKYLDVFRAAGVYAVD	S	F	T	L	Y	A	K	D	I	S	G	P	L	K	P	G	V	D	I	E	N	V	K	T	V	I	P	V	Y	I	P	L	E	A	V	K	F	V	D	K	I	V	D	V	S	I	L	D	G	V	V	P	P	V	I	K	Q	V	S	A	Q	T	Y	S	V	A	Q	D	A	P																	
D24h	RIVLDVA	S	V	F	N	T	G	V	Q	E	G	A	K	A	L	Y	A	N	L	E	P	K	A	E	Q	Y	A	V	I	T	W	R	A	L	N	K	L	P	L	P	Q	V	A	N	V	V	P	T	A	V	F	S	E	K	Y	N	D	V	V	R	G	T	T	E	Q	G	Y	R	V	S	Y	L	P	L	L	P	T	E	K	I	K	V	F	G	D	E	A	S
E24h	RIVLDVA	S	V	F	N	T	G	V	Q	E	G	A	K	A	L	Y	A	N	L	E	P	K	A	E	Q	Y	A	V	I	T	W	R	A	L	N	K	L	P	L	P	Q	V	A	N	V	V	P	T	A	V	F	S	E	K	Y	N	D	V	V	R	G	T	T	E	Q	G	Y	R	V	S	Y	L	P	L	L	P	T	E	K	I	K	V	F	G	D	E	A	S
D48h	RIVLDVA	S	V	F	N	T	G	V	Q	E	G	A	K	A	L	Y	A	N	L	E	P	K	A	E	Q	Y	A	V	I	T	W	R	A	L	N	K	L	P	L	P	Q	V	A	N	V	V	P	T	A	V	F	S	E	K	Y	N	D	V	V	R	G	T	T	E	Q	G	Y	R	V	S	Y	L	P	L	L	P	T	E	K	I	K	V	F	G	D	E	A	S
E48h	RIVLDVA	S	V	F	N	T	G	V	Q	E	G	A	K	A	L	Y	A	N	L	E	P	K	A	E	Q	Y	A	V	I	T	W	R	A	L	N	K	L	P	L	P	Q	V	A	N	V	V	P	T	A	V	F	S	E	K	Y	N	D	V	V	R	G	T	T	E	Q	G	Y	R	V	S	Y	L	P	L	L	P	T	E	K	I	K	V	F	G	D	E	A	S

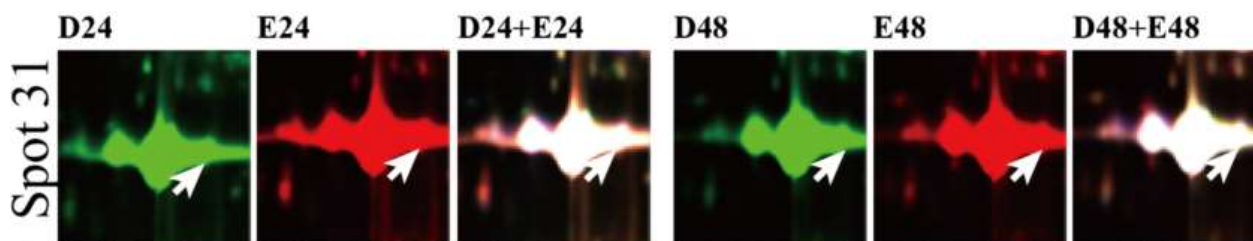
Predicted 3-D structure and phosphorylated amino acids in different [SRPP204](#) isoforms:





## Spot No. 31

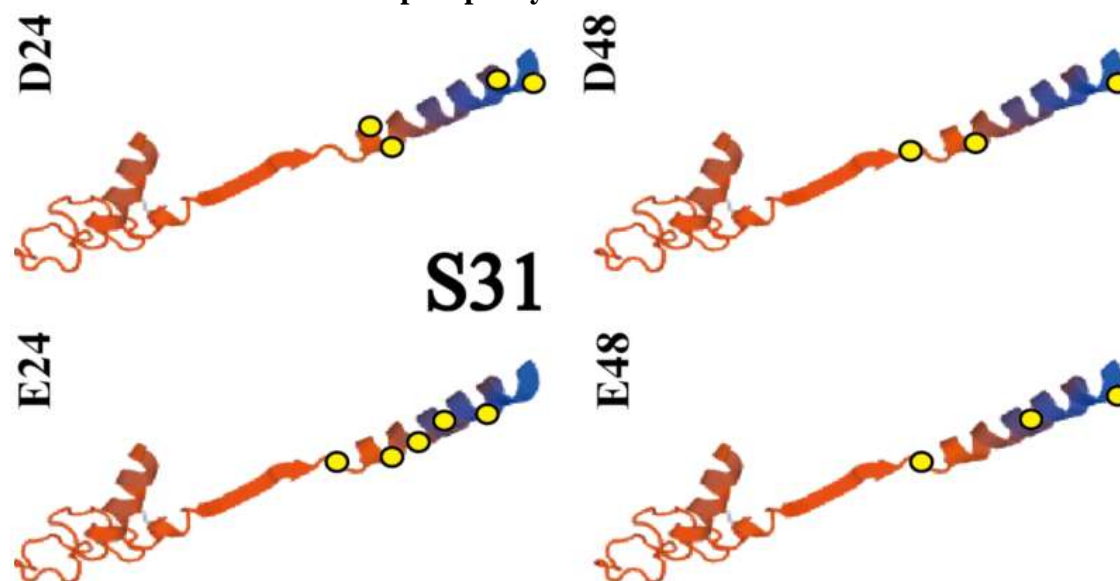
Changed pattern on DIGE gel:



Location in rubber genome: scaffold1222\_60641.mRNA1

Protein name: Small rubber particle protein/SRPP204

Predicted 3-D structure and phosphorylated amino acids:



Detail information for phosphorylation of amino acid sites:

D24: MAEEVEERLKYLDFVRAAGVYAVDSFSSTLYLYAKDISGPLKPGVDTIENVVKTVVTPVYYYIPLEAVKFVDKTVD

E24: MAEEVEERLKYLDFVRAAGVYAVDSFSSTLYLYAKDISGPLKPGVDTIENVVKTVVTPVYYYIPLEAVKFVDKTVD

D48: MAEEVEERLKYLDFVRAAGVYAVDSFSSTLYLYAKDISGPLKPGVDTIENVVKTVVTPVYYYIPLEAVKFVDKTVD

E48: MAEEVEERLKYLDFVRAAGVYAVDSFSSTLYLYAKDISGPLKPGVDTIENVVKTVVTPVYYYIPLEAVKFVDKTVD

D24: VSVTSLDGVVPPVIKQVSAQTYSVAQDAPRIVLDVASSVFNTGVQEGAKALYANLEPKAEQYAVITWRALNKLPL

E24: VSVTSLDGVVPPVIKQVSAQTYSVAQDAPRIVLDVASSVFNTGVQEGAKALYANLEPKAEQYAVITWRALNKLPL

D48: VSVTSLDGVVPPVIKQVSAQTYSVAQDAPRIVLDVASSVFNTGVQEGAKALYANLEPKAEQYAVITWRALNKLPL

E48: VSVTSLDGVVPPVIKQVSAQTYSVAQDAPRIVLDVASSVFNTGVQEGAKALYANLEPKAEQYAVITWRALNKLPL

D24: VPQVANVVVPTAVYFSEKYNDVVRGTTEQGYRVSSYLPLLPTEKITKVFGDEAS

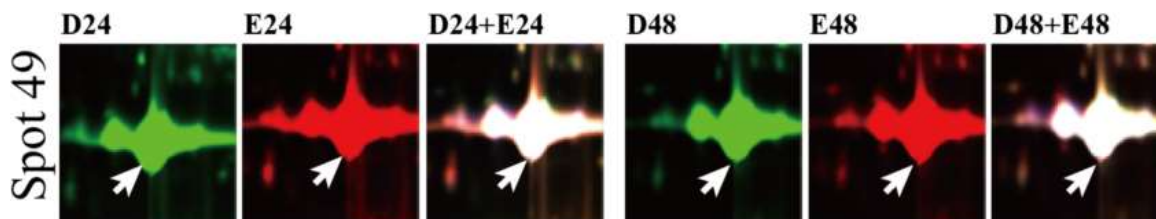
E24: VPQVANVVVPTAVYFSEKYNDVVRGTTEQGYRVSSYLPLLPTEKITKVFGDEAS

D48: VPQVANVVVPTAVYFSEKYNDVVRGTTEQGYRVSSYLPLLPTEKITKVFGDEAS

E48: VPQVANVVVPTAVYFSEKYNDVVRGTTEQGYRVSSYLPLLPTEKITKVFGDEAS

Spot No. 49

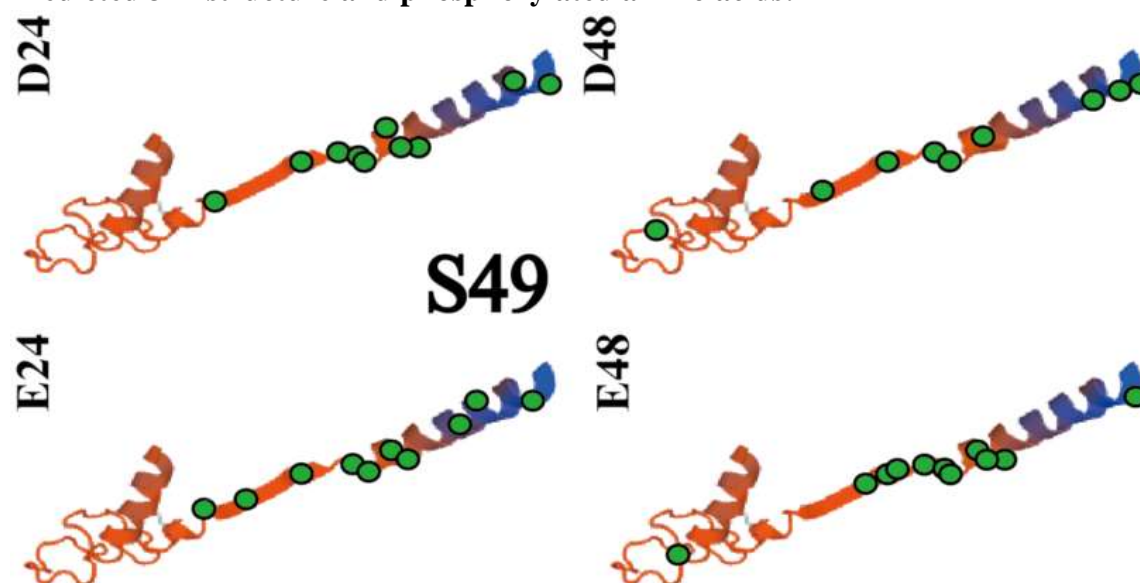
Changed pattern on DIGE gel:



Location in rubber genome: scaffold1222\_60641.mRNA1

Protein name: Small rubber particle protein/SRPP204

Predicted 3-D structure and phosphorylated amino acids:



Detail information for phosphorylation of amino acid sites:

D24: MAEEVEEERLKYLDFVRAAGVYAVDSFSSTLYLYAKDISGPLKPGVD**T**IENVVKTVVTPVYYIPLEAVKFVDK**T**V**D**

E24: MAEEVEEERLKYLDFVRAAGVYAVDSFSSTLYLYAKDISGPLKPGVD**D**IENVVKTVV**T**IPVYYIPLEAVKFVDK**T**V**D**

D48: MAEEVEEERLKYLDFVRAAGVYAVDSF**S**TLYLYAKDISGPLKPGVD**T**IENVVK**T**VVTPVYYIPLEAVKFVDK**T**V**D**

E48: MAEEVEEERLKYLDFVRAAGVYAVD**S**FSTLYLYAKDISGPLKPGVD**T**IENVVKTVVTPVYYIPLEAV**K**FVDK**T**V**D**

D24: V**S**V**T****S**LDGVVPPV**I**K**Q**VSA**Q**T**S**VAQDAPRIVLDVASSVFNTGVQEGAKALYANLEPKAEQYAVITWRALNKLPL

E24: V**S**V**T****S**LDGVVPPV**I**K**Q**VSA**Q**T**S**VAQDAPRIVLDVA**S**SVFNTGVQEGAKALYANLEPKAEQYAVITWRALNKLPL

D48: V**S**V**T****S**LDGVVPPV**I**K**Q**VSA**Q**T**S**VAQDAPRIVLDVA**S**SVFNTGVQEGAKALYANLEPKAEQYAVITWRALNKLPL

E48: V**S**V**T****S**LDGVVPPV**I**K**Q**VSA**Q**T**S**VAQDAPRIVLDVA**S**SVFNTGVQEGAKALYANLEPKAEQYAVITWRALNKLPL

D24: VPQVANVVVPTAVYFSEKYNDVVRGTTEQGYRV**S**SYLPLLPTEK**I**TKVFGDEAS

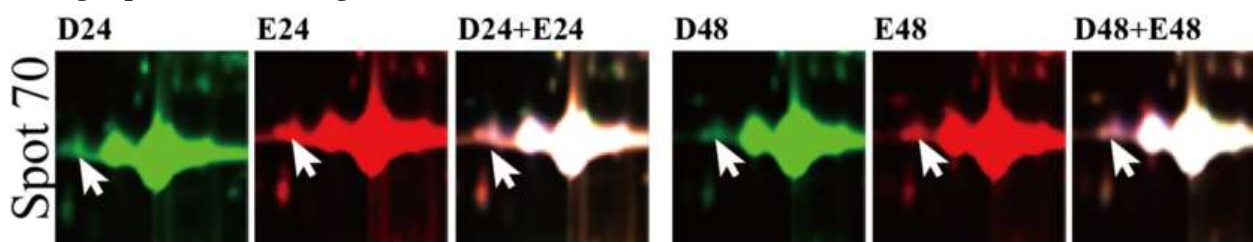
E24: VPQVANVVVPTAVYFSEKYNDVVRGTTEQGYRVSSYLPLLP**T**EK**I**TKVFGDEAS

D48: VPQVANVVVPTAVYFSEKYNDVVRGT**T**EQGYRVSSYLPLLP**T**EK**I**TKVFGDEAS

E48: VPQVANVVVPTAVYFSEKYNDVVRGTTEQGYRVSSYLPLLPTEK**I**TKVFGDEAS

## Spot No. 70

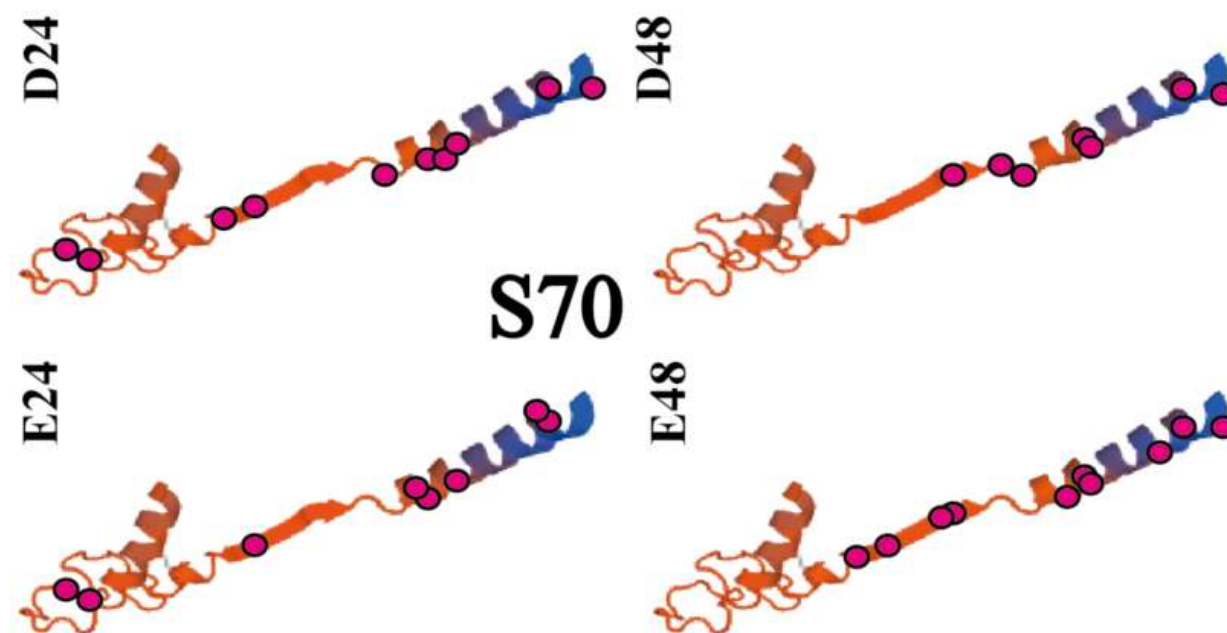
Changed pattern on DIGE gel:



**Location in rubber genome:** scaffold1222\_60641.mRNA1

**Protein name:** Small rubber particle protein/SRPP204

**Predicted 3-D structure and phosphorylated amino acids:**



Detail information for phosphorylation of amino acid sites:

D24: MAEEVEERLKYLDVRAAGVYAVDSFSTLYLYAKDISGPLKPGVDTIENVVKTVVTPVYYIPLEAVKFVDKTV

E24: MAEEVEERLKYLDVRAAGVYAVDSFSTLYLYAKDISGPLKPGVDTIENVVKTVVTPVYYIPLEAVKFVDKTV

D48: MAEEVEERLKYLDVRAAGVYAVDSFSTLYLYAKDISGPLKPGVDTIENVVKTVVTPVYYIPLEAVKFVDKTVD

E48: MAEEVEERLKYLDVRAAGVYAVDSFSTLYLYAKDISGPLKPGVDTIENVVKTVVTPVYYIPLEAVKFVDKTVD

D24: VSVTSLDGVVPPVIKQVSAQTSVAQDAPRIVLDVASSVFNTGVQEGAKALYANLEPKAEQYAVITWRALNKLPL

E24: VSVTSLDGVVPPVIKQVSAQTYSVAQDAPRIVLDVASSVFNTGVQEGAKALYANLEPKAEQYAVITWRALNKLPL

D48: VSVTSLDGVVPPVIKQVSAQTYSVAQDAPRIVLDVASSVFNTGVQEGAKALYANLEPKAEQYAVITWRALNKLPL

E48: VSVTSLDGVVPPVIKQVSAQTYSVAQDAPRIVLDVASSVFNTGVQEGAKALYANLEPKAEQYAVITWRALNKLPL

D24: VPQVANVVVPTAVYFSEKYNDVVRGTTEQGYRVSYLPLLTEKITTKVFGDEAS

E24: VPQVANVVVPTAVYFSEKYNDVVRGTTEQGYRVSSYLPLLTEKITKVFGDEAS

D48: VPQVANVVVPTAVYFSEKYNDVVRGTTEQGYRVSYLPLLTEKITTKVFGDEAS

E48: VPQVANVVVPTAVYFSEKYNDVVRGTTEQGYRVSYLPLLTEKITTKVFGDEAS