

PRIMATE SDR42E VARIANTS

			x	x	x		
SDR42E1	H. sapiens	MDPKRSQKESVLITGGSGYFGF	r1	GCALNQNGVHVILFDISSPAQTIPEGIKFIQGD	IRH	1p.1	
SDR42E1	P. troglodytes	MDPKRSQKETVLITGGSGYFGF	r1	GCALNQKGVHVILFDISSPAQTIPEGIKFIQGD	IRH	1p.1	
SDR42E1	P. paniscus	MDPKRSQKETVLITGGSGYFGF	r1	GCALNQKGVHVILFDISSPAQTIPEGIKFIQGD	IRH	1p.1	
SDR42E1	N. leucogenys	MDPQRPQKETVLITGGSGYFGF	r1	GCALNQKGVHVILFDISSPAQTIPEGIKFIRGD	IRH	1p.1	
SDR42E1	M. mulatta	MDPKRSQKETVLITGGGGYFGF	r1	GCALNQKGVHVILFDISSPAETIPEGIKFIQGD	ICH	1p.1	
SDR42E1	P. anubis	MDPKRSQQETVLITGGGGYFGF	r1	GCALNQKGVHVILFDISSPAETIPEGIKFIQGD	IRH	1p.1	
SDR42E1	C. jacchus	MDPKRSPKETVLITGGGGYFGF	r1	GCALNQKGVHVILFDINSPAQTVPEGIKFIQGD	IRH	1p.1	
SDR42E1	M. murinus	MDAEKSPAETVLITGGGGYFGF	-1	GCALNQQGVHVILFDINSPAETIPEGIKFARGD	IRH	1p.1	
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SDR42E1	H. sapiens	LSDVEKAFQDADVTCVFHIASYGM	SGREQ	LNRNLIKEVNVRGTDN	ILQVCQRRRVPRLVY
SDR42E1	P. troglodytes	LSDVEKAFQDADVTCVFHIASYGM	SGREQ	LNRNLIKEVNVRGTDN	ILQVCQRRSVPRVY
SDR42E1	P. paniscus	LSDVEKAFQDADVTCVFHIASYGM	SGREQ	LNRNLIKEVNVRGTDN	ILQVCQRRSVPLVY
SDR42E1	N. leucogenys	LSDVDKAFQDADVTCVFHIASYGM	SGREQ	LNRNLIKEVNIRGTDN	ILQACQRRRVPRLVY
SDR42E1	M. mulatta	LSDIEKAFQDADITCVFHIASYGM	SGREQ	LNRNLIKEVNIGGTDN	ILQACQRRRVPRLVY
SDR42E1	P. anubis	LSDIEKAFQDADITCVFHIASYGM	SGREQ	LNRNLIKEVNIGGTDN	ILQACQRRRVPRLVY
SDR42E1	C. jacchus	VSDVEKAFQDADVTCVFHIASYGM	SGWEQ	LSRNPIEEVNIGGTDN	ILQACQRRMVPRVY
SDR42E1	M. murinus	LSDVENAFQDANVTCVFHIASYGM	SGREQ	LNGNLIKEVNVGGTDN	VLQACRRRGVPRVY
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			+	+	
SDR42E1	H. sapiens	TSTFNVIFGGQVIRNGDESLPYLPLHLHPDHYSRTKSIAEQKVLEANATPLDRGDGVLRT			
SDR42E1	P. troglodytes	TSTFNVIFGGQVIRNGDESLPYLPLHLHPDHYSRTKSIAEQKVLEANATPLDRGDGVLRT			
SDR42E1	P. paniscus	TSTFNVIFGGQVIRNGDESLPYLPLHLHPDHYSRTKSIAEQKVLEANATPLDRGDGVLRT			
SDR42E1	N. leucogenys	TSTFNVIFGGQVIRNGDESLPYLPLHLHPDHYSRTKSIAEQKVLEANGTPLDRGDGVLRT			
SDR42E1	M. mulatta	TSTFNVIFGGQVIRNGDESLPYLPLHLHPDHYSRTKSIAEKKVLEANGTPLDRGDGVLRT			
SDR42E1	P. anubis	TSTFNVIFGGQVIRNGDESLPYLPLHLHPDHYSRTKSIAEKKVLEANGTPLDRGNGVLRT			
SDR42E1	C. jacchus	TSTFNVIFGGQVIRNGDESLPYLPLHLHPDHYSRTKSIAEKKVLEANGTPLNGGGDVLRT			
SDR42E1	M. murinus	TSTFNVIFGGQVIRNGDESLPYLPLHLHPDHYSRTKSIAERKVLEANGTLLTG			

SDR42E1	H. sapiens	CALRPAGIYGPGEQRHLPRIVSYIEKGLFKFVYGDPRSLVEFVHVDNLVQA	HI	LASEALR
SDR42E1	P. troglodytes	CALRPAGIYGPGEQRHLPRIVSYIEKGLFKFVYGDPRSLVEFVHVDNLVQA	HI	LASEALR
SDR42E1	P. paniscus	CALRPAGIYGPGEQRHLPRIVSYIEKGLFKFVYGDPRSLVEFVHVDNLVQA	HI	LASEALR
SDR42E1	N. leucogenys	CALRPAGIYGPGEQRHLPRIVSYIEKGLFKFVYGDPRSLVEFVHVDNLVQA	HI	LASEALR
SDR42E1	M. mulatta	CALRPAGIYGPGEQRHLPRIVSYIEKGLFKFVYGDPRSLVEFVHVDNLVQA	HI	LASEALR
SDR42E1	P. anubis	CALRPAGIYGPGEQRHLPRIVSYIEKGLFKFVYGDPRSLVEFVHVDNLVQA	HI	LASEALR
SDR42E1	C. jacchus	CALRPAGIYGPGEQRHLPRIVSYIEKGLFKFVYGDPSLVEFVHVDNLVQA	HI	LALALR
SDR42E1	M. murinus	CALRPAGIYGPGERRHLPRIVSYIERGLFKFVYGDPSLVEFVHVDNLVQA	HI	LASEALK

SDR42E1	H. sapiens	ADKGHIASGQPYFISDGRPVNNFEFFRPLVEGLGYTFPSTRPLTLVYCFAFL	TEMVHFI
SDR42E1	P. troglodytes	ADKGHIASGQPYFISDGRPVNNFEFFRPLVEGLGYTFPSTRPLTLVYCFAFL	TEMVHFI
SDR42E1	P. paniscus	ADKGHIASGQPYFISDGRPVNNFEFFRPLVEGLGYTFPSTRPLTLVYCFAFL	TEMVHFI
SDR42E1	N. leucogenys	ADKGHIASGQPYFISDGRPVNNFEFFRPLVEGLGYTFPSTRPLTLVYCFAFL	TEMVHFI
SDR42E1	M. mulatta	ADKGHIASGQPYFISDGRPVNNFEFFRPLVEGLGYTFPSTRPLTLVYCFAFL	TEMVHFI
SDR42E1	P. anubis	ADKGHIASGQPYFISDGRPVNNFEFFRPLVEGLGYTFPSTRPLTLVYCFAFL	TEMVHFI
SDR42E1	C. jacchus	ADKGHIASGQSYFISDGRPVNNFEFFRPLVEGLGYTFPSTRPLTLVYCFAFL	TEMVHFI

SDR42E1 M. murinus	ADKGYIASGQPYFISDGRPVNNFEFFRPLVEGLGYTFPSTRLPLYLIYCFAFLTEMAHFL *****
SDR42E1 H. sapiens	LGRLYNFQPFLLTRTEVYKTGVTHYFSLEKAKKELGYKAQPFDLQEAVEWFKAHGHGRSSG
SDR42E1 P. troglodytes	LGRLYNFQPFLLTRTEVYKTGVTHYFSLEKAKKELGYKAQPFDLQEAVEWFKAHGHGRSSG
SDR42E1 P. paniscus	LGRLYNFQPFLLTRTEVYKTGVTHYFSLEKAKKELGYKAQPFDLQEAVEWFKAHGHGRSSG
SDR42E1 N. leucogenys	LGRLYNFQPFLLTRTEVYKTGVTHYFSLEKAKKELGYKAQPFDLQEAVEWFKAHGHGRSSG
SDR42E1 M. mulatta	LGRLYNFQPFLLTRTEVYKTGVTHYFSLEKAKKELGYKAQPFDLQEAVEWFKAHGHGRSSG
SDR42E1 P. anubis	LGRLYNFQPFLLTRTEVYKTGVTHYFSLEKAKKELGYKAQPFDLQEAVEWFKAHGHGRSSG
SDR42E1 C. jacchus	LGRLYNFQPFLLTRTEVYKTGVTHYFSLEKAKKELGYKAQPFDLQEVEWFKAHGHGRSSG
SDR42E1 M. murinus	LGRLYNFQPFLLTRTEVYKTGVTHYFSLEKAKKELGYEAQPFDLQEVEWFKAHGHGRSPG *****
SDR42E1 H. sapiens	SRDSECFVWDGLLVFLIIIAVLMWLPSSVILSL
SDR42E1 P. troglodytes	SRDSECFVWDGLLVFLIIIAVLMWLPSSVILSL
SDR42E1 P. paniscus	SRDSECFVWDGLLVFLIIIAVLMWLPSSVILSL
SDR42E1 N. leucogenys	SSDLECFVWDGLLVFLIIIAVLMWLPSSVILSL
SDR42E1 M. mulatta	SRDSECFIWDGLLVFLIIIAVLIWLPSSVILSL
SDR42E1 P. anubis	SRDSECFIWDGLLVFLIIIAVLIWLPSSVILSL
SDR42E1 C. jacchus	SRDSDCFVWDGLLVFLIIATLTWLLSVILL-
SDR42E1 M. murinus	SHGSEYHVWRGLLVFFLVIAVLTWLLPSVILL * * * * *

Figure S49. Alignment of the primate SDR42E protein variants. For further details see Online Resources 2 Fig. S3.

* symbol marks the position of identical amino acid residues of the aligned SDR protein sequences.

SDR42E2	H. sapiens	MKSNPPRSSLEACKAAGQGEKSCPVCQACGEVSGPRSGSGSES	
SDR42E2	P. troglodytes	MKSNPPRSSLEACKAAGQGEKSCPVCQACGEVSGPRSGSGSES	
SDR42E2	P. paniscus	-----	
SDR42E2	N. leucogenys	-----	
SDR42E2	M. mulatta	MKSNPPGSSPEACKAAGQGEKSCPVCQACGEVSGPRSGLGSESGPAPKPGAIPGPGLGPK	
SDR42E2	P. anubis	MKSNPPGSSPEACKFAAQGEKSCPVCQACGEVSGPRSGLGSESGPAPKPGAIPGPGLGPK	
SDR42E2	C. jacchus	MKPNPPGSSPEACKAAGQGEKSCPVCQACGEVSGPRSGLGSESGFPVKPGAIPGPGLGPK	
SDR42E2	M. murinus	MKPNPTG-----KAADQGEKSCPVCQACGGVSGPKSGLGPGPGP----NSIPGQGAGPG	
SDR42E2	H. sapiens	AIPGPQAGSGTVPRPGAISGTGPGLGPGPGAGSVPGPGAGSV	
SDR42E2	P. troglodytes	AIPGPQAGSDTVPRPGAISGTGPSLGPGPGAGSVPGPGTGSVP-----GPGAGSVPG	
SDR42E2	P. paniscus	-----	
SDR42E2	N. leucogenys	-----	
SDR42E2	M. mulatta	AIPGPQAGSGVAPRPGAISGTGPGLGPGPGARSVPGPGAESIPGLGAGSVPGPGTGSIPG	
SDR42E2	P. anubis	AIPGPQAGSGVALRPGAISGTGLGLGPGPGAGSVPGPGVGSIPGLGAGSVPGPGTGSIPG	
SDR42E2	C. jacchus	AIPEPQVGSGAGLRPDTVSGTGPGLGPGPGSGSVPGPGARSVPAPGARLAPAPGARSAPG	
SDR42E2	M. murinus	SVPGPGAVPGRGA-----GSGAVPGRGAG-----	
SDR42E2	H. sapiens	PGAGSVPGPGAGSVPGPGAGSGPGLGGGLGPGVGAGPGAGSVPGPGAGSVPGPGAGSVPG	
SDR42E2	P. troglodytes	LGAGSVPGPGAGSVPGPGAGSGPGLGAGLGPGGLGAGPGAGSVPGPGAGSVPG-----	
SDR42E2	P. paniscus	-----	
SDR42E2	N. leucogenys	-----	
SDR42E2	M. mulatta	LGVGSIIPGPGAGSILGPGAGSGPGLGAGSAPGPGSGSVPGLGAGLGHGLGAGPEAGSVPG	
SDR42E2	P. anubis	LGVGSIIPGPGAGSVLGPGAGSGPGLGAGSVPGPGAGSVSGLGAGLGHGLGAGPEAGSVPG	
SDR42E2	C. jacchus	LGAEVPEPGAGLVPGPGSGSAPGLGAGSVPVIGAGSVPG-----PGAGSVPG	
SDR42E2	M. murinus	--PGAVPGRGAG-----PGAVPGRGAGPGAVPGPESGPGAVLG	
SDR42E2	H. sapiens	PGAGSVPGAGAGSTPEPELGPGLRQGS	
SDR42E2	P. troglodytes	-----PGAGSTPEPELGPGLRQGS	
SDR42E2	P. paniscus	-----MKSNNPPRSSLEACKAAGqaPQQKTQAKPTKAARQKV	1p.2
SDR42E2	N. leucogenys	-----MKSNNPPGS-SPDACKAVGqaPQQKTQAKPTKAARQKV	1p.2
SDR42E2	M. mulatta	PGAGSVPGPGAGSTPEPELGPGRQGS	
SDR42E2	P. anubis	PGAGSVPGPGAGSTPEPELGPGLRQGS	
SDR42E2	C. jacchus	LGSGSAPGPGAGSTPEPELGSGLTQGS	
SDR42E2	M. murinus	PGPGLGPGPGAGSLRPEVGPGRKGS	
		***** * ****	
SDR42E2	H. sapiens	LVTGGGGYLGFSILGSHLAKSGTSVILLDRRRPQWELSPETKFIqaDVRDEEALYRAFEGV	1p.0
SDR42E2	P. troglodytes	LVTGGGGYLGFSILGSHLAKSGTSVILLDCRRPQWELSPETKFIqaDVRDEEALYRAFEGV	1p.0
SDR42E2	P. paniscus	LVTGGGGYLGFSILGSHLAKSGTSVILLDRRRPQWELSPETKFIqaDVRDEEALYRAFEGV	2p.0
SDR42E2	N. leucogenys	LVTGGGGYLGFSILGSHLAKTGTSVILLDRRRPQWELSPETKFIqaDVRDEEALYRAFEGV	2p.0
SDR42E2	M. mulatta	LVTGGGGYLGFSILGSHLAKSGTPVILLDRRRPQWELSPETEFIqaDVRDEEALYRAFKGV	1p.0
SDR42E2	P. anubis	LVTGGGGYLGFSILGSHLAKSGTPVILLDRRRPQWELCPETEFIqaDVRDEEALYRAFKGV	1p.0
SDR42E2	C. jacchus	LVTGGGGYLGFSILGSHLAKSGTSVILLDRRRPQWELSPETEFIqaDVRDEEALYRAFEGV	1p.0
SDR42E2	M. murinus	LVTGGGGYLGFTLGSSLARSGTSVILLDLHRPQWTLPSGTEFIqaDVRDEETLYRAFEGV	1p.0
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SDR42E2	H. sapiens	DCVFHVASYGMSGAEklQK-EQIESINVGGTKLVI	dvCVRRRVPRLIYTSTVNVAFGGKP	2p.0	3p.2
SDR42E2	P. troglodytes	DCVFHVASYGISGAEklQK-EQIESINVGGTKLVI	dvCVRRRVPRLIYTSTVNVAFGGKP	2p.0	3p.2
SDR42E2	P. paniscus	DCVFHVASYGMSGAEklQK-EQIESINVGGTKLVI	dvCVRRRVPRLIYTSTVNVAFGGKP	3p.0	4p.2
SDR42E2	N. leucogenys	DCVFHVASYGMSGAEklQK-EQIESINVGGTKLVI	dvCVRRRVPRLIYTSTVNVAFGGKP	3p.0	4p.2
SDR42E2	M. mulatta	DCVFHMASYGMSGAEklQK-EQIESINVGGTKLVI	dvCVRQRPRLIYTSTVNVAFGGKP	2p.0	3p.2
SDR42E2	P. anubis	DCVFHMASYGLSGAEklQEMRMESINVGGTKLVI	dvCVRQRPRLIYTSTVNVAFGGKP	2p.0	3p.2
SDR42E2	C. jacchus	DCVFHVASYGMSGAEklQK-EQIESINVGGTKLVI	dvCVRRRVPRLIYTSTVNVAFGGKP	2p.0	3p.2
SDR42E2	M. murinus	DCVFHMASYGMSGEEklQK-EQIESINVGGTKLVI	dvCVRRRVPRLIYTSTVNVAFGGKP	2p.0	3p.2
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SDR42E2	H. sapiens	IEQGDEDSVPYFPLD	ehVDHYSRTKAIADQLTLMANGMPLpgGGTLRTCVRPPGIYGPE	4p.0	5p.2
SDR42E2	P. troglodytes	IEQGDEDSVPYFPLD	ehVDHYSRTKAIADQLTLMANGTPLpgGGTLRTCVRPPGIYGPE	4p.0	5p.2
SDR42E2	P. paniscus	IEQGDEDSVPYFPLD	ehVDHYSRTKAIADQLTLMANGTPLpgGGTLRTCVRPPGIYGPE	5p.0	6p.2
SDR42E2	N. leucogenys	IEQGDEDSVPYFPLD	ehIDHYSRTKAIADQLTLMANGTPLpgGGTLRTCVRPPGIYGPE	5p.0	6p.2
SDR42E2	M. mulatta	IEQGDEDSVPYFPLD	ehIDHYSRTKAIADQLTLMANGTPLpgGGALRTCVRPPGIYGPE	4p.0	5p.2
SDR42E2	P. anubis	IEQGDEDSVPYFPLD	khIDHYSRTKAIADQLTLMANGTPLpgGGALRTCVRPPGIYGPE	4p.0	5p.2
SDR42E2	C. jacchus	IQQGDEDSVPYFPLD	ehIDHYSRTKAIADQLTLMANGTPLpgGGILRTCVRPPGIYGPE	4p.0	5p.2
SDR42E2	M. murinus	IEQGDEDSVPYFPLD	khVDHYSRTKAIADQLTLMANGTPLpgGGTLRTCVRPPGIYGPE	4p.0	5p.2
		* *****	*****		
SDR42E2	H. sapiens	EQRHLPRV	agHIKKRLFMFRFGDHKARMNWVHVHNLVQAHVLAEEALTTAKGYVasGQAY	6p.0	7p.0
SDR42E2	P. troglodytes	EQRHLPRV	agHIKKRLFMFRFGDRKARMNWVHVHNLVQAHVLAEEALTTAKGYVasGQAY	6p.0	7p.0
SDR42E2	P. paniscus	EQRHLPRV	agHIKKRLFMFRFGDRKARMNWVHVHNLVQAHVLAEEALTTAKGYVasGQAY	7p.0	8p.0
SDR42E2	N. leucogenys	EQRHLPRV	agHIKKRLFMFRFGDRKARMNWVHVHNLVQAHMLASEALTTAKGYVasGQAY	7p.0	8p.0
SDR42E2	M. mulatta	EQRHLPRV	agHIKKRLFMFRFGDRKARMNWVHVHNLVQAHVLAEEALTTAKGYVasGQAY	6p.0	7p.0
SDR42E2	P. anubis	EQRHLPRV	agHIKKRLFMFRFGDRKARMNWVHVHNLVQAHVLAEEALTTAKGYVangQAY	6p.0	7p.0
SDR42E2	C. jacchus	EQRHLPRV	agHIKKRLFSFRFGDRKAQMNWVHVHNVQAHVLAALKALTVGKGYVasGQAY	6p.0	7p.0
SDR42E2	M. murinus	EQRHLPRV	vsHLKKMLFMVRFGRDRTRMNWVHVHNLVQAHMLAAEALTTAKGYVasGQAY	6p.0	7p.0
		*****	*****		
SDR42E2	H. sapiens	YINDGESVNLFEWMAPl	feKLGYSQPWIQVPTSWVYLtaAVMERLHLALRPICSLPPLLT	8p.0	9p.2
SDR42E2	P. troglodytes	YINDGESVNLFEWMAPl	feKLGYSQPWIQVPTSWVYLtaAVMERLHLALRPICSLPPLLT	8p.0	9p.2
SDR42E2	P. paniscus	YINDGESVNLFEWMAPl	feKLGYSQPWIQVPTSWVYLtaAVMERLHLALRPICSLPPLLT	9p.0	10p.2
SDR42E2	N. leucogenys	YINDGESVNLFEWMAPl	feKLGYSQPWIQVPTSWVYLtaAVMERLHLALRPICSLPPLLT	9p.0	10p.2
SDR42E2	M. mulatta	YINDGESVNLFEWMAPl	feKLGYSQPWIQVPTSWVYLtaAVMEHLHLALRPICCLPPLLT	8p.0	9p.2
SDR42E2	P. anubis	YINDGESVNLFEWMAPl	feKLGYSQPWIQVPTSWVYLtaAVMERLHLALRPICCLPPLLT	8p.0	9p.2
SDR42E2	C. jacchus	YINDGESVNLFEWMAPl	feKLGYSQPRIQVPTSWVYLtaAVMEHLHLALRPICNLPLLLT	8p.0	9p.2
SDR42E2	M. murinus	YINDGDSINLFEWIAPl	feKLGYSQPWIQVPTSWIYLtaSVMEHVHLALRPICSVPLLLT	8p.0	9p.2
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SDR42E2	H. sapiens	RS	evRSVAVTHTFQIAKARAQLGYAPDKFRFADAVELYVQSTTRRPRGSTARTLLRLLLR	10p.0	
SDR42E2	P. troglodytes	RS	evRSVAVTHTFQIAKARAQLGYAPDKFRFADAVELYVQSTTRRPRGSTARTLLRLLLG	10p.0	
SDR42E2	P. paniscus	RS	evRSVAVTHTFQIAKARAQLGYAPDKFRFADAVELYVQSTTRRPRGSTARTLLRLLLG	11p.0	
SDR42E2	N. leucogenys	RS	evRSVAVTHTFQIAKARAQLGYAPDKFRFADAVELYVQSTTWRPRGSTARTLLRLLLG	11p.0	
SDR42E2	M. mulatta	RS	evRSVAVTHTFQIAKARAQLGYAPDKFKFADAVELYVQSTTRRPRGSTARTLLRLLLG	10p.0	
SDR42E2	P. anubis	RS	evRSVAVTHTFQIAKARAQLGYAPDKFRFADAVELYVQSTTRRPRGSTARTLLRLLLG	10p.0	
SDR42E2	C. jacchus	RS	evCSVAVTHTFQIAKARAQLGYAPDKFSLADVVERYVQSTSFRPRSSTAQTLLRLLLG	10p.0	
SDR42E2	M. murinus	RS	evCSVAVTHTFQIAKARAQLGYAPDKFSFSDAVERYMQSSAPRQRGSTTRALLRLLLG	10p.0	
		*****	*****		
SDR42E2	H. sapiens	LLLFLGLLALALHFLGLQPLHAAVERL			

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SDR42E2 P. troglodytes  LLLFLGLLALALHFLGLQPLHAAVERL
SDR42E2 P. paniscus    LLLFLGLLALALHFLGLQPLHAAVERL
SDR42E2 N. leucogenys  LLLFLGLLALALHFLGLQPLHAAVERL
SDR42E2 M. mulatta     LLLFLGLLALALHFLGLQPLHSSVERL
SDR42E2 P. anubis      LLLFLGLLALALHFLGLQPLQASVERL
SDR42E2 C. jacchus     LLLLGLLALALHFLGLQPLQAAMKRL
SDR42E2 M. murinus     LL-LLGLLALALHYLCQPLRAATERL
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Figure S50. Alignment of the primate SDR42E2 proteins variants. For further details see Online Resources 2 Fig. S3.

* symbol marks the position of identical amino acid residues of the aligned SDR protein sequences.

Species	Gene symbol	Gene ID	Chr	Enzyme symbol	Exons n.	Phases formula	% identity	aa n.	Structure consensus	Catalysis Consensus
<i>Homo sapiens</i>	SDR42E1	93517	16	SDR42E1	2	1	100.00	393	GGSGYFG	YSRTK
<i>Pan troglodytes</i>		468047	16				98.98			
<i>Pan paniscus</i>		100984124	16				98.73			
<i>Nomascus leucogenys</i>		100588195	2				96.69			
<i>Macaca mulatta</i>		714229	20				96.18			
<i>Papio anubis</i>		101004680	20				95.93			
<i>Callithrix jacchus</i>		100393984	20				91.58	392	GGGGYFG	
<i>Microcebus murinus</i>		105859480	20				87.50	393		
<i>Homo sapiens</i>	SDR42E2	100288072	16	SDR42E2	11	0020200020	100.00	626	GGGGYLK	YSRTK
<i>Pan troglodytes</i>		100615511	16			97.84	602			
<i>Pan paniscus</i>		100971052	16		12	20020200020	95.50	422		
<i>Nomascus leucogenys</i>		100592297	2				93.84			
<i>Macaca mulatta</i>		106994972	20		11	0020200020	91.21	626		
<i>Papio anubis</i>		101004328	20				90.42	627		
<i>Callithrix jacchus</i>		100895632	12				87.13	614		
<i>Microcebus murinus</i>		105885292	17				80.00	555		

Table S51a. Genetic and molecular data of primate SDR42E family variants. For further details see Online Resources Table S39a.

Enzyme	Species	% identity	Enzyme	Species	% identity
SDR42E1	<i>Homo sapiens</i>	100.00	SDR42E2	<i>Homo sapiens</i>	100.00
	<i>Pan troglodytes</i>	98.98		<i>Pan troglodytes</i>	97.84
	<i>Pan paniscus</i>	98.73		<i>Pan paniscus</i>	95.50
	<i>Nomascus leucogenys</i>	96.69		<i>Nomascus leucogenys</i>	93.84
	<i>Macaca mulatta</i>	96.18		<i>Macaca mulatta</i>	91.21
	<i>Papio anubis</i>	95.93		<i>Papio anubis</i>	90.42
	<i>Callithrix jacchus</i>	91.58		<i>Callithrix jacchus</i>	87.13
	<i>Microcebus murinus</i>	87.50		<i>Microcebus murinus</i>	80.00
SDR42E2	<i>Homo sapiens</i>	47.95	SDR42E1	<i>Homo sapiens</i>	47.95
	<i>Pan troglodytes</i>	48.21		<i>Pan troglodytes</i>	47.95
	<i>Pan paniscus</i>	48.46		<i>Pan paniscus</i>	47.69
	<i>Nomascus leucogenys</i>	48.97		<i>Nomascus leucogenys</i>	47.69
	<i>Macaca mulatta</i>	48.21		<i>Macaca mulatta</i>	47.69
	<i>Papio anubis</i>	47.44		<i>Papio anubis</i>	47.95
	<i>Callithrix jacchus</i>	47.18		<i>Callithrix jacchus</i>	48.07
	<i>Microcebus murinus</i>	48.84		<i>Microcebus murinus</i>	47.04

Table S51b. Relative percent identity of primate SDR42E family protein variants.