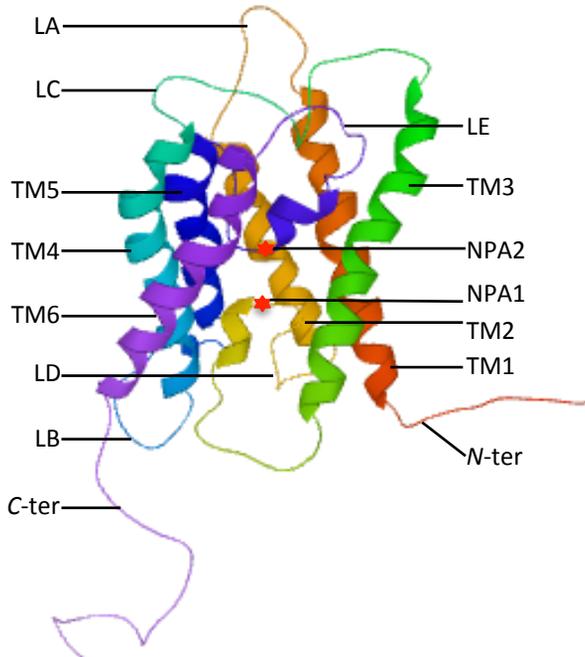


Figure S5

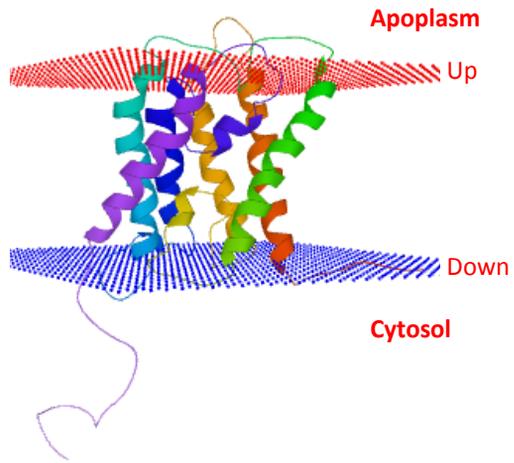
Figure S5. Predicted 3D models of the *Bpe*AQP monomers (*Bpe*PIP1s; *Bpe*PIP2s; *Bpe*TIPs; *Bpe*XIPs; *Bpe*NIPs; *Bpe*SIPs). Structures were generated by using the PHYRE2.0 Protein Fold Recognition server, using the Normal mode modeling based on alignment to experimentally solved protein structures, and built with the Mole2.5 software. Each structure is supported by the hydropathy and charge, indexes of the channel (right of the 3D modelisation), obtained by MOLE2.5 software. Each member is represented in lateral view. Models were visualized by rainbow color from *N*- to *C*-terminus, where the intracellular (B,D) and extracellular (A,C,E) loops, and transmembrane helices are shown, as firstly illustrated with the control structure (*So*PIP2,1 from *Spinacia oleracea*) with its lateral and top views, plus a representation of the structure embedded in the membrane.

Control structure, SoPIP2;1

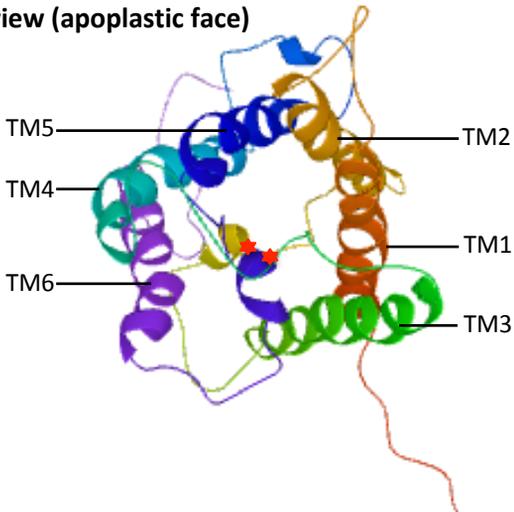
Lateral view



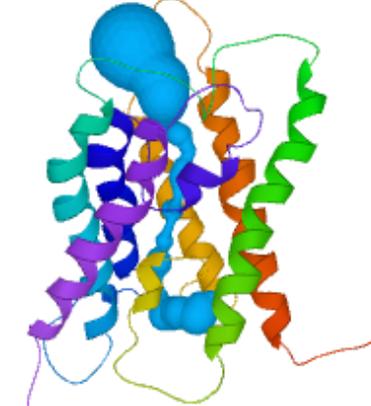
SoPIP2;1 structure embedded in the membrane



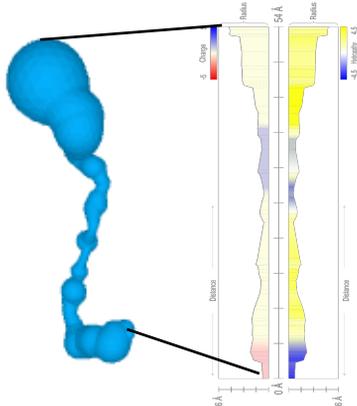
90° Top view (apoplastic face)



Physicochemical properties of SoPIP2;1pore structure



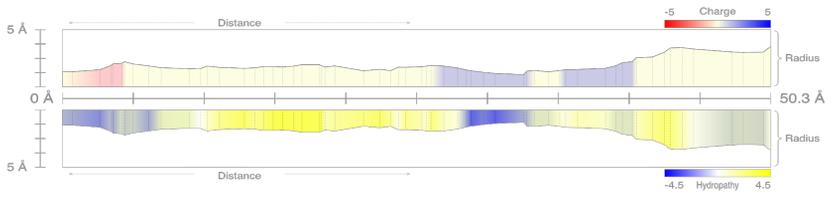
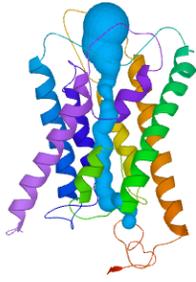
Model dimensions (Å) of SoPIP2;1
X:76.562 Y:49.788 Z:51.612



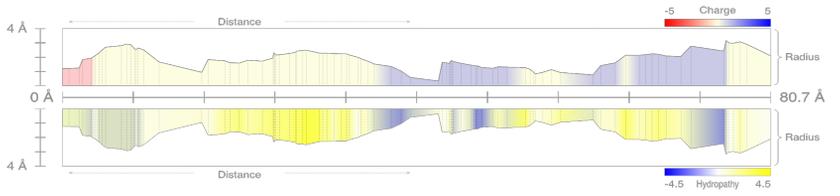
- Length of the channel : 54 Å
- Radius of the channel bottleneck : 0.6 Å
- Average of hydrophathy : 1.27
- Charge : 0
- Polarity (Average of lining amino acid polarities) : 8.47
- Mutability, Average of relative mutability : 86
- Lipophilicity, logP-scale : 1.04
- Lipophilicity, logD-scale : 0.85
- Ionizable residues : 2

BpePIP1s

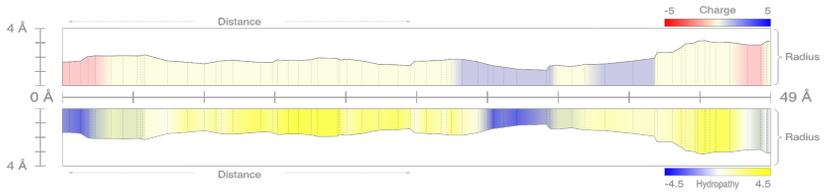
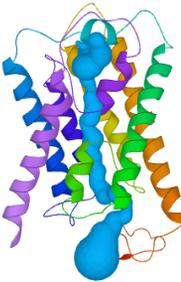
BpePIP1;1



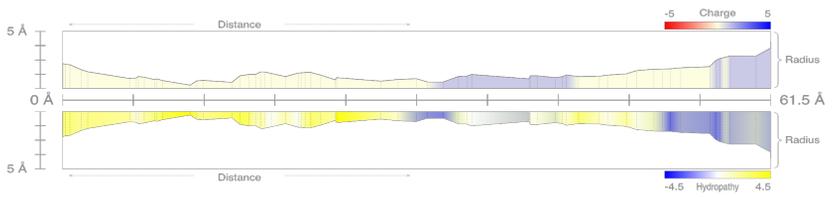
BpePIP1;2



BpePIP1;3

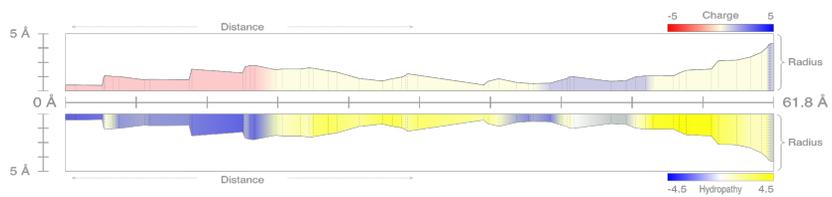
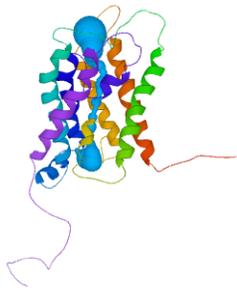


BpePIP1;4

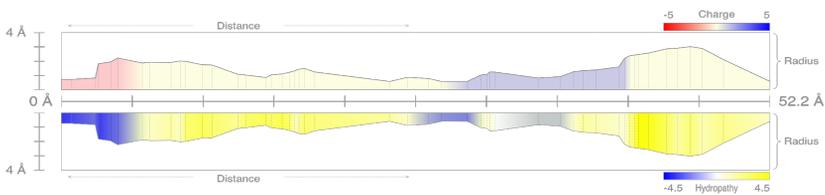


BpePIP2s

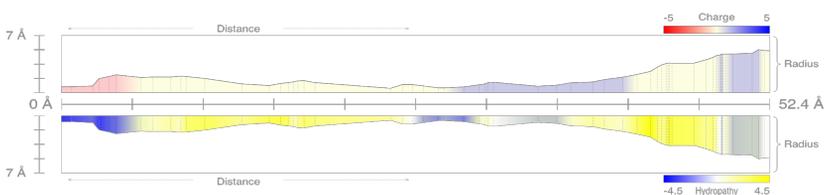
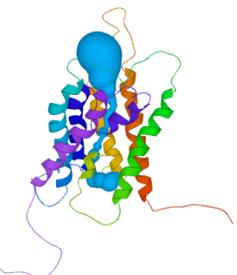
BpePIP2;1



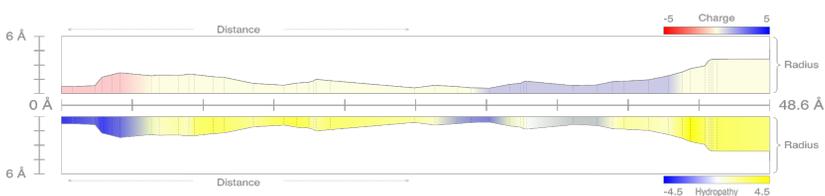
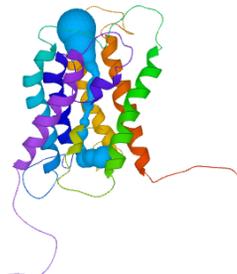
BpePIP2;2



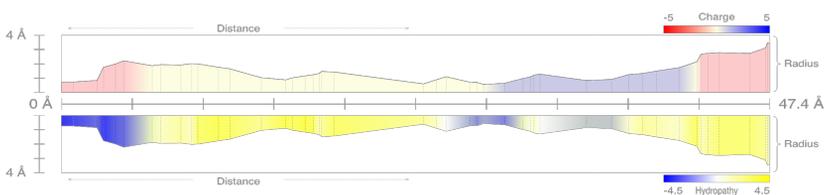
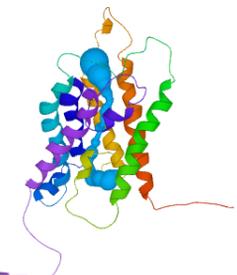
BpePIP2;3



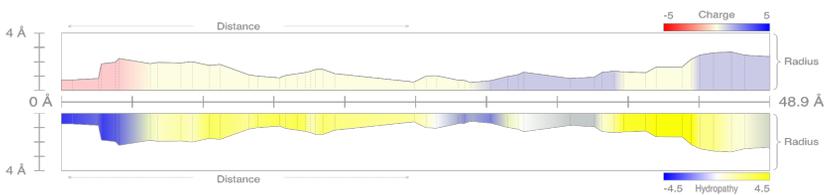
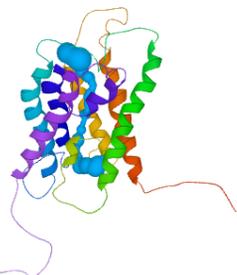
BpePIP2;4



BpePIP2;5

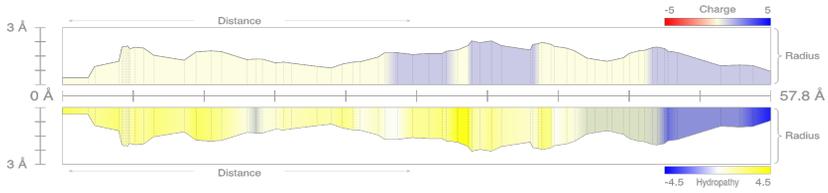
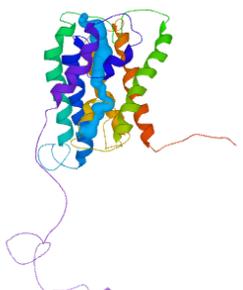


BpePIP2;6

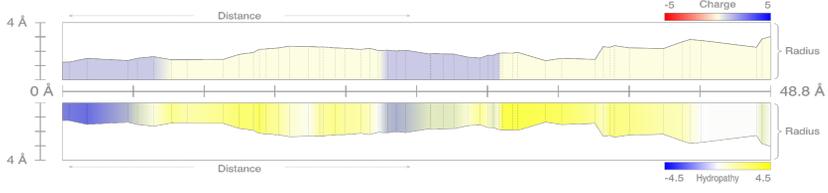


BpeTIPs

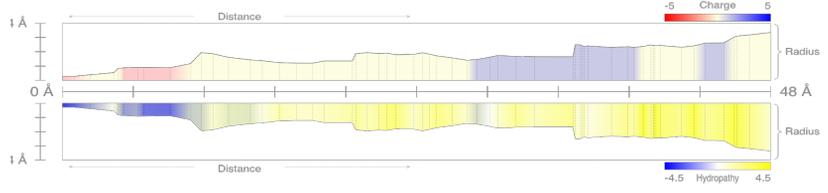
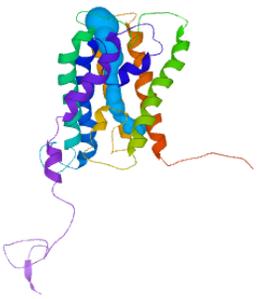
BpeXIP1;1



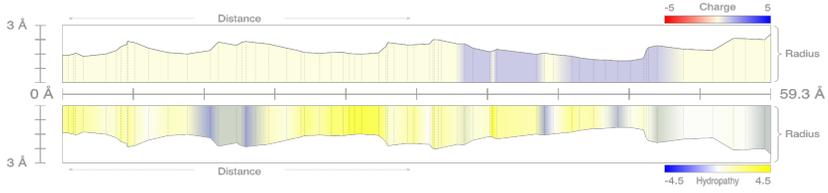
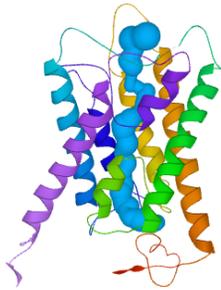
BpeXIP1;2



BpeXIP1;3

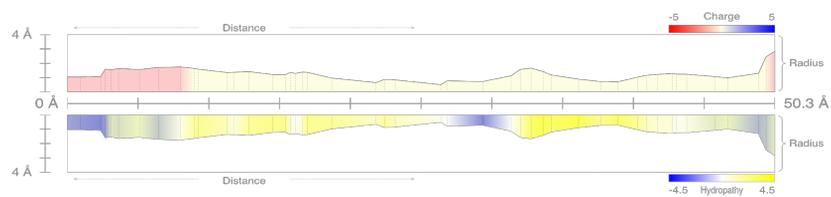
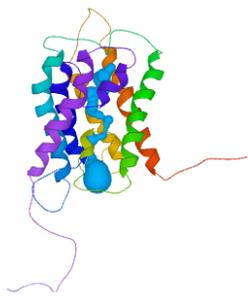


BpeXIP2;1

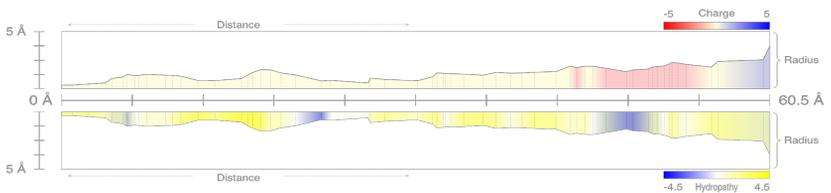


BpeTIPs

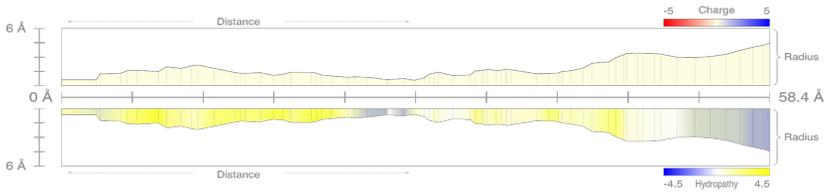
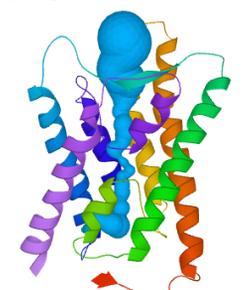
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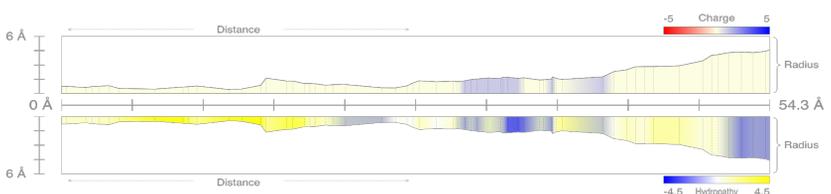
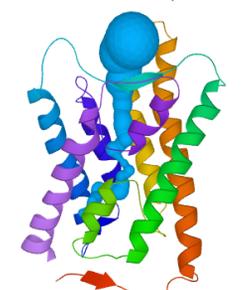
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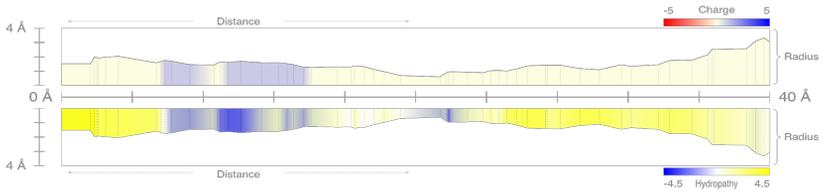
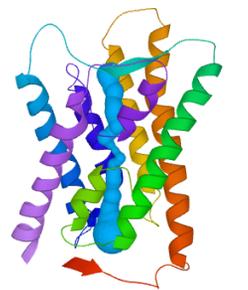
BpeTIP1;3



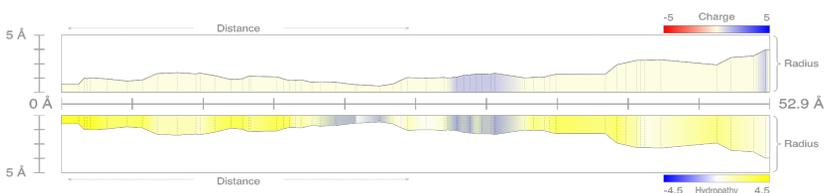
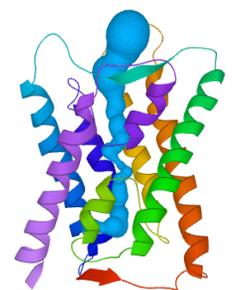
BpeTIP2;1



BpeTIP2;2

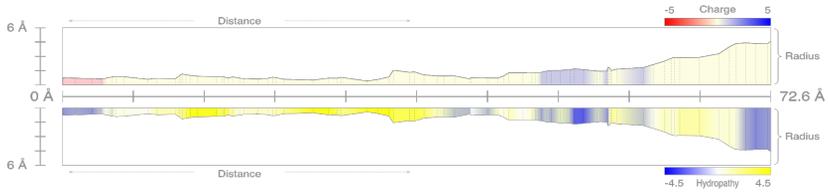
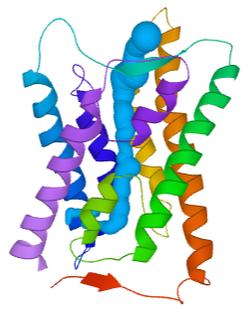


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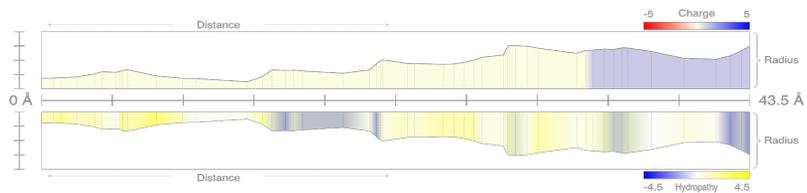
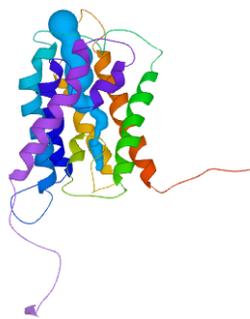


BpeTIPs

BpeTIP4;1

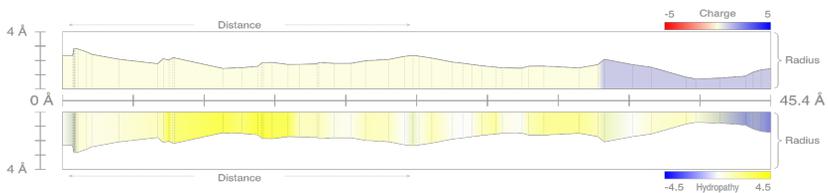
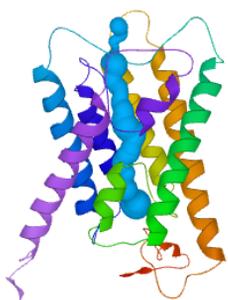


BpeTIP5;1

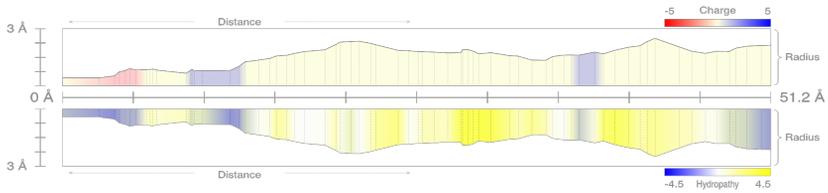
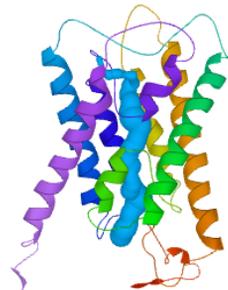


BpeNIPs

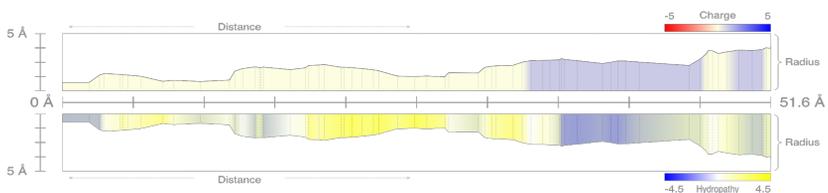
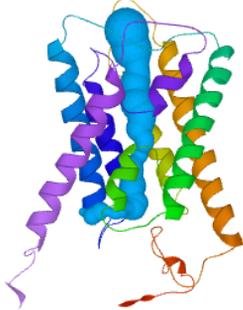
BpeNIP1;1



BpeNIP1;2

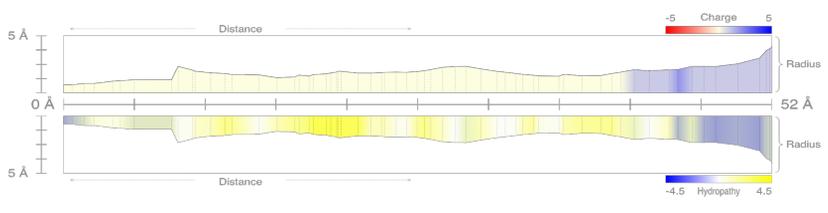
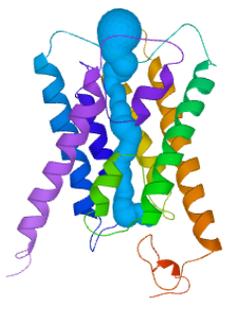


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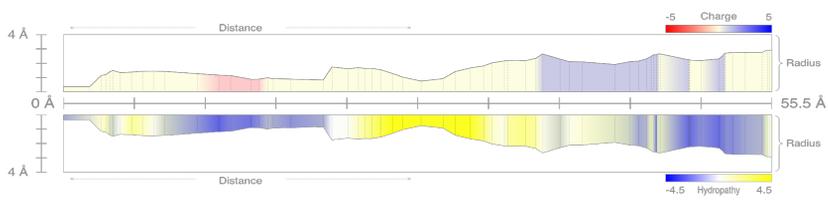
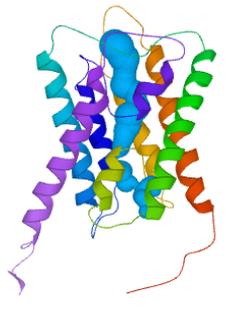


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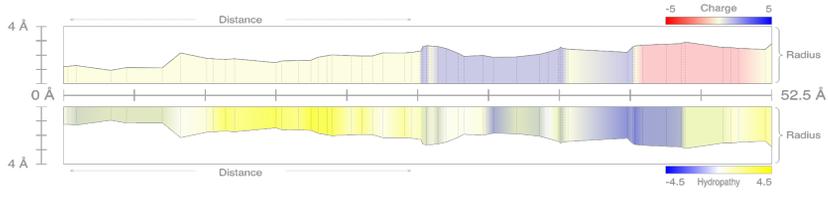
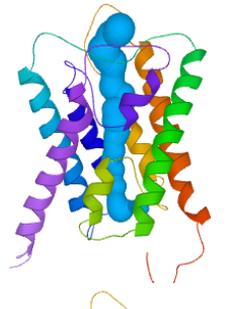
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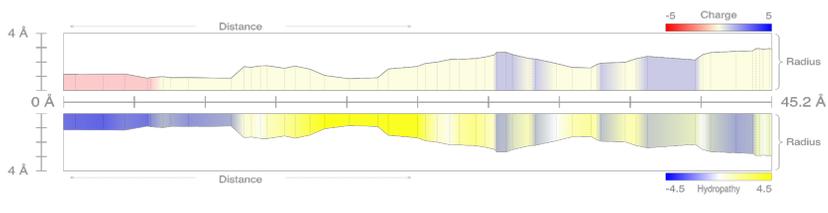
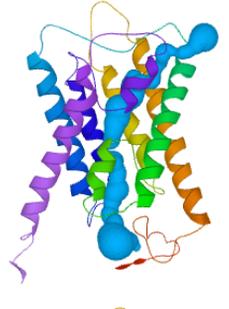
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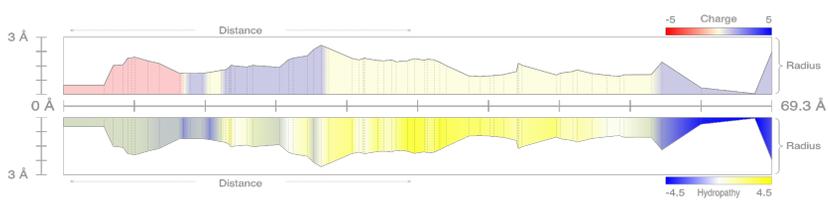
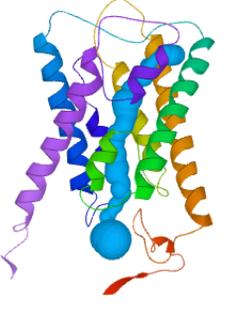
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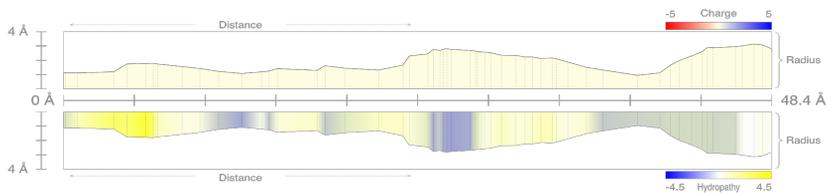
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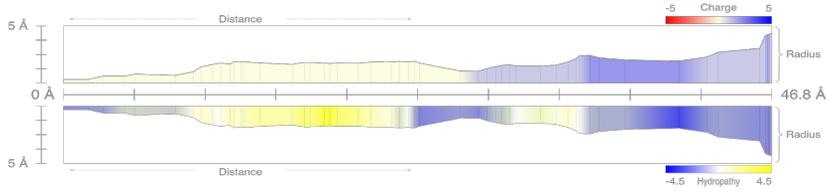
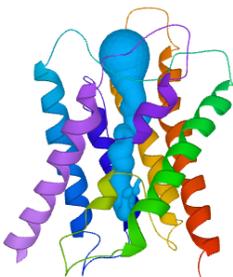
BpeNP7;1



BpeSIP1;1



BpeSIP1;2



BpeSIP2;1

