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Supporting information for article:

High-resolution crystal structures of the protein tyrosine phosphatase epsilon D1 and D2 domains for structure-based drug design

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Table S1 Macromolecule-production information

PTPε D1 Domain	
Source organism	<i>Homo sapiens</i>
DNA source	DNASU Plasmid Repository Clone: HsCD00438889, Arizona State University, AZ, USA
Piggy back primer	GGGGACAAGTTTGTACAAAAAAGCAGGCTCGGAGAACC TGTA CTTCAG (PE-277)
Forward Primer	GAGAACCTGTACTTCCAGTCAGGGCCCAAGAAGTATTTT CCCATCCCC (PE-2552)
Reverse Primer	GGGGACCACTTTGTACAAGAAAGCTGGGTTACCCGTAGA GGTAGTACTCGAGTAAGGC (PE-2589)
Cloning vector	pDONR221
Expression vector	pBA2525
Expression host	<i>E. coli</i> BL21(DE3) RIL
Complete amino-acid sequence of the construct produced	SGPKKYFPIPVEHLEEEIRIRSADDCKQFREEFNSLPSGHIQG TFELANKEENREKNRYPNILPNDHSRVILSQLDGI PCSDYIN ASYIDGYKEKNKFIAAQGPKQETVNDFWRMVWEQKSATI VMLTNLKERKEEKCHQYWPDQGCWTYGNIRVCVEDCVV LVDYTIRKFCIQPLPDGCKAPRLVSQLHFTSWPDFGVPFTP IGMLKFLKKVKTLPVHAGPIVVHCSAGVGRFTTFIVIDAM MAMMHAEQKVDVFEFVSRIRNQRPMVQTD MQYTFIYQA LLEYLYG
PTPε D2 domain	
Source organism	<i>Homo sapiens</i>
DNA source	DNASU Plasmid Repository Clone: HsCD00438889, Arizona State University, AZ, USA
Piggy back primer	GGGGACAAGTTTGTACAAAAAAGCAGGCTCGGAGAACC TGTA CTTCAG (PE-277)
Forward Primer	GAGAACCTGTACTTCCAGGGGCTGGAGGAGGAGTTC (PE-2776)
Reverse Primer	GGGGACCACTTTGTACAAGAAAGCTGGGTTATTATTGTA AATTAGCATAATC (PE-2777)
Cloning vector	pDONR221

Expression vector	pSRK2607
Expression host	<i>E. coli</i> Rosetta (DE3)
Complete amino-acid sequence of the construct produced	GLEEEFRKLTNVRIMKENMRTGNLPANMKKARVIQIIPYDF NRVILSMKRGQEYTDYINASFIDGYRQKDYFIATQGPLAHT VEDFWRMIWEWKSHTIVMLTEVQEREQDKCYQYWPTEGS VTHGEITIEIKNDTLSEAISIRDFLVTLNQPQARQEEQVRVV RQFHFHGWPEIGIPAEGKGMIDLIAAVQKQQQQTGNHPITV HCSAGAGRTGTFIALSNILERVKAEGLLDVFQAVKSLRLQR PHMVQTLEQYEFQYKVVQDFIDIFSDYANFK
PTPε D2 domain (GGG spacer linker)	
Source organism	<i>Homo sapiens</i>
DNA source	pSRK2607, National Cancer Institute
Forward Primer	AACCTGTACTTCCAGGGTGGTGGTGGGCTGGAGGAGGA G (PE-2806)
Reverse Primer	CTCCTCCTCCAGCCCACCACCACCCTGGAAGTACAGGTT (PE-2807)
Cloning vector	pDEST-HisMBP
Expression vector	pSRK2607
Expression host	<i>E. coli</i> Rosetta (DE3)
Complete amino-acid sequence of the construct produced	GGGGLEEEFRKLTNVRIMKENMRTGNLPANMKKARVIQIIP YDFNRVILSMKRGQEYTDYINASFIDGYRQKDYFIATQGPL AHTVEDFWRMIWEWKSHTIVMLTEVQEREQDKCYQYWPT EGSVTHGEITIEIKNDTLSEAISIRDFLVTLNQPQARQEEQVR VVRQFHFHGWPEIGIPAEGKGMIDLIAAVQKQQQQTGNHPI TVHCSAGAGRTGTFIALSNILERVKAEGLLDVFQAVKSLRL QRPHMVQTLEQYEFQYKVVQDFIDIFSDYANFK
PTPε (A455N/V457Y/E597D)	
Source organism	<i>Homo sapiens</i>
DNA source	pSRK2607, National Cancer Institute
QuikChange Lighting, Step 1	
Forward Primer	ACGGCTGGCCTGATATCGGGATTCCCG (PE-2783)
Reverse Primer	GCAAACATGAAGAAGGCCAGGTATATCCAGATCATCCC GTATGAC (PE-2783)

QuikChange Lightning, Step 2	
Forward primer	AACCTGTA CTTCCAGGGTGGTGGTGGGCTGGAGGAGGA G (PE-2806)
Reverse primer	CTCCTCCTCCAGCCCACCACCACCTGGAAGTACAGGTT (PE-2807)
QuikChange Lightning, Step 3	
Forward Primer	CAACTTGCCGGCAAACATGAAGAAGAACAGGTATATCC AGATCATCCCGTATGACTTCA (PE-2808)
Reverse primer	TGAAGTCATACGGGATGATCTGGATATACCTGTTCTTCTT CATGTTTGCCGGCAAGTTG (PE-2809)
Cloning vector	pDEST-HisMBP
Expression vector	pSRK2612
Expression host	<i>E. coli</i> Rosetta (DE3)
Complete amino-acid sequence of the construct produced	GGGGL EEEFRKLTNVRIMKENMRTGNLPANMKKNRYIQIIP YDFNRVILSMKRGQEYTDYINASFIDGYRQKDYFIATQGGL AHTVEDFWRMIWEWKSHTIVMLTEVQEREQDKCYQYWPT EGSVTHGEITIEIKNDTLSEAISIRDFLVTLNQPQARQEEQVR VVRQFHFHGWPDIGIPAEGKGMIDLIAAVQKQQQQTGNHPI TVHCSAGAGRTGTFIALSNILERVKAEGLLDVFQAVKSLRL QRPHMVQTLEQYEFQYKVVQDFIDIFSDYANFK