

## *MRC PPU REAGENTS*

### **Standard Operating Procedure**

#### **Preparation of BORA [1 - 559]**

**Enzyme description:-** BORA [1 – 559]

**Clone number:-** DU 15717

**Source:-** Recombinant

**Expression system:-** *E.coli*

**Tag:-** N-terminal GST

**Purification method:-** GSH Sepharose

**Calculated molecular mass:-**

Monoisotopic 88, 949.46 daltons

Average Mass 89, 006.20 daltons

[cysteines reduced, methionines have not been oxidised]

**Theoretical pI:-** 5.04

**Purity:-** >75 %

**Enzyme storage buffer:-**

50 mM Tris-HCl pH 7.5, 270 mM Sucrose, 150 mM NaCl, 0.1 mM EGTA,  
0.1 % 2-mercaptoethanol, 0.02 % Brij-35, 0.2 mM PMSF, 1 mM Benzamidine.

**Storage temperature:-** -70 deg C

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## Clone Data Sheet

### BORA [1 – 559]

<b><u>Protein</u></b>	BORA [1 – 559]
<b><u>Clone number</u></b>	DU 15717
<b><u>Species</u></b>	Human
<b><u>Accession number</u></b>	Q6PGQ7-1
<b><u>Tags</u></b>	N-terminal GST
<b><u>Bacterially expressed protein</u></b>	<p>MSPILGYWKIKGLVQPTRLLLEYLEEKYEEHLYERDEGDKWRNKKFEL GLEFPNLPYYIDGDVKLTQSMAIIRYIADKHNMLGGCPKERAEISMLE GAVLDIRYGVSRIAYSKDFETLKVDFLSKLPEMLKMFEDRLCHKTYLN GDHVTHPDFMLYDALDVVLYMDPMCLDAFPKLVCFKKRIEAIPOIDKY LKSSKYIAWPLQGWQATFGGGDHPKSDLEVLFGQPLGSPGIPGSTRA AAMGDVKESKMQITPETPGRIPVLNPFESPSDYSNLHEQTLASPSVFK <b>STKLPTPGKFRWSIDQLAVINPVEIDPEDIHRQALYLSHSRIDKDVED</b> <b>KRQKAIEEFFTKDVI VSPWTDHEGKQLSQCHSSKCTNINSDSPVGKK</b> <b>LTIHSEKSDAACQTL LSLPVDFNLENILGDYFRADEFADQSPGNLSSS</b> <b>SLRRKLFLDGNGSISDSLPSASPGSPHSGVQTSLEMFYSIDLSPVKCR</b> <b>SPLQTPSSGQFSSSPIQASAKKYSLGSITSPSPISSPTFSPIEFQIGE</b> <b>TPLSEQRKFTVHSPDASSGTNSNGITNPCIRSPYIDGCSP IKNWSPMR</b> <b>LQMYSGGTQYRTSVIQIPFTLETQGEDEEDKENIPSTDVSSPAMDAAG</b> <b>IHLRQFSNEASTHGTHLVVTAMSVTONQSSASEKELALLQDVEREKDN</b> <b>NTVDMVDP IEIADETTWIKEPVDNGSLPMTDFVSGIAFSIENSHMCMC</b> <b>PLAESSVIPCESSNIQMDSGYNTQNCGSNIMDTVGAESYCKESDAQTC</b> <b>EVESKSQAFNMKQDHTTQRCWMKTASPFQCSSP</b></p>
<b><u>Native sequence</u></b>	<p>Amino acids M1 – P559 (end) of human BORA. Residue M243 of the fusion protein is equivalent to M1 of the native enzyme. The GST tag is located at residues 1 – 220.</p>
<b><u>Protease cleavage</u></b>	PreScission ( <u>LEVLFQGP</u> ) residues 221 – 228
<b><u>Cloning sites</u></b>	<i>Not1</i> sites of pGEX6P-2

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### Nucleotide Sequence Of Insert

gcggccgcgATGGGAGATGTCAAGGAATCAAAGATGCAAATAACACCAGA  
AACTCCAGGAAGGATCCCTGTTTTAAATCCTTTTGAAAGTCCTAGTGATT  
ATTCTAATCTCCATGAACAACTCTCGCCAGTCCTTCTGTTTTTAAATCA  
ACAAAATTACCAACTCCAGGGAAATTTAGATGGTCTATTGATCAACTAGC  
TGTAATAAATCCTGTAGAAATAGACCCAGAAGATATTCATCGTCAAGCTT  
TATACTTAAGTCATTCTCGAATAGATAAAGATGTGGAAGACAAAAGACAA  
AAAGCCATTGAAGAGTTTTTCACTAAAGATGTCATCGTACCCCTCTCCTTG  
GACTGATCATGAAGGGAAACAGCTTTCACAATGTCATTCCAGTAAATGCA  
CTAACATAAATAGTGACTCTCCAGTTGGAAAAAAGCTGACCATTCACTCT  
GAGAAAAGCGATGCTGCTTGTGACACATTGCTGTCTCTTCTGTGGATTT  
TAATTTAGAAAATATATTAGGTGACTATTTTAGAGCTGATGAATTTGCAG  
ATCAATCTCCTGGAAACCTCAGTTCTTCATCCCTCAGAAGAAAGCTGTTT  
TTAGATGGGAACGGAAGCATCTCCGACTCCTTACCTTCGGCTTCTCCCGG  
AAGTCTCACAGTGGTGTTCAAACATCACTAGAGATGTTTTATTCAATAG  
ATTTGTCTCCTGTAAAGTGTAGGAGCCCCTTGCAGACACCAAGTTCGGGG  
CAGTTTTCTTCTAGCCCTATTTCAGGCTAGTGCAAAAAAATACAGCTTGGG  
AAGCATAACTAGTCCTTCGCCTATTTCTTCACCCACTTTCTCACCAATTG  
AATTTTCAGATAGGAGAGACTCCACTCTCAGAACAAGGAAGTTTACTGTT  
CATTCTCCTGATGCTTCATCTGGAACAAATTCTAATGGGATAACTAATCC  
GTGTATCAGAAGTCCTTATATAGATGGCTGCTCGCCAATTAATAATTGGT  
CTCCTATGAGACTTCAGATGTATAGTGGTGGTACTCAGTATCGGACCTCA  
GTGATTTCAGATACCTTTTACTCTTGAGACTCAAGGTGAAGATGAGGAAGA  
TAAAGAGAATATTCCTTCCACAGATGTCTCATCACCCGCCATGGATGCTG  
CTGGAATACACCTACGGCAGTTTAGTAATGAGGCTTCTACCCATGGTACA  
CATTTGGTTGTGACTGCCATGTCTGTTACACAAAATCAGTCCAGTGCTTC  
TGAGAAAAGAAATTAGCACTGTTGCAGGATGTTGAAAGGGAGAAAGACAATA  
ACACTGTGGATATGGTTGATCCTATAGAGATAGCAGATGAGACCACTTGG  
ATTAAGGAGCCGTTGATAATGGCAGTTTACCCATGACTGATTTTGTAAAG  
TGGCATTGCCTTCAGTATTGAAAACCTCATATGTGCATGTCACCTCTTG  
CTGAAAGCAGTGTCATTCCTTGTGAAAGCAGTAACATTCAGATGGATAGT  
GGCTATAATACGCAGAAATTGTGGAAGCAATATTTATGGATACAGTTGGGGC  
AGAAAGTTACTGCAAAGAAAGTGATGCACAAACATGTGAAGTTGAGAGTA  
AATCTCAAGCATTTAATATGAAGCAAGACCACACAACACAGAGGTGTTGG  
ATGAAAACAGCAAGCCTTTTCAATGCAGCAGTCCAtagggcggccgc