

Recombinant Human BMPR1A

CATALOG #:	4881-10	10 µg
	4881-1000	1 mg
LOT #:		
SYNONYMS:	BMPR-1A, BMP-R1A, BMPR1A, BMR1A, CD292, CD-292	
SOURCE:	Insect cells (<i>Baculovirus</i>)	
PURITY:	> 90 % by SDS-PAGE and RP-HPLC analyses	
FORM:	Lyophilized from sterile PBS.	

RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in sterile PBS to a concentration ≥ 100 µg/ml. This solution can then be diluted into other aqueous buffers.

STORAGE CONDITIONS:

The lyophilized protein is best-stored desiccated at -20°C. Reconstituted human BMPR1A should be stored at 4°C for 2-7 days and at -20°C for future use. For long term storage it is recommended to add a carrier protein (0.1 % HSA or BSA) and store as working aliquots at -20°C.

DESCRIPTION:

The bone morphogenetic protein (BMP) receptors are a family of transmembrane serine/threonine kinases that include the type I receptors BMPR1A and BMPR1B and the type II receptor BMPR2. These receptors are also closely related to the Activin receptors, ACVR1 and ACVR2. The ligands of these receptors are members of the TGF-beta superfamily. TGF-betas and activins transduce their signals through the formation of heteromeric complexes with 2 different types of serine (threonine) kinase receptors: type I receptors of about 50-55 kDa and type II receptors of about 70-80 kDa. Type II receptors bind ligands in the absence of type I receptors, but they require their respective type I receptors for signaling, whereas type I receptors require their respective type II receptors for ligand binding. BMPR1A Human Recombinant extracellular domain produced in baculovirus is a monomeric, glycosylated, polypeptide chain fused with 6xHis tag at C-terminus and having a molecular mass of 23 kDa. The BMR1A is purified by proprietary chromatographic techniques.

BIOLOGICAL ACTIVITY:

Measured by its ability to inhibit recombinant human BMP-2 induced alkaline phosphatase production by C2C12 myogenic cells. The ED₅₀ for this effect is typically 1-3 µg/ml in the presence of 500 ng/ml of recombinant human BMP-2.

FOR RESEARCH USE ONLY! Not to be used in humans.

RELATED PRODUCTS:

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- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

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- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
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- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

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- HAT Colorimetric Assay Kit & Reagents
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