

Active Recombinant Rat Epha2 Protein, His-tagged

Cat. No. Epha2-11084R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Rat Epha2 Protein, His Tag is expressed from human 293 cells (HEK293). It contains AA Gln 24 - Met 536 (Accession # D3ZBN3). This protein carries a polyhistidine tag at the C-terminus. Predicted N-terminus: Gln 24
Species	Rat
Source	HEK293
ProteinLength	24-536 aa
Description	Receptor tyrosine kinase which binds promiscuously membrane-bound ephrin-A family ligands residing on adjacent cells, leading to contact-dependent bidirectional signaling into neighboring cells. The signaling pathway downstream of the receptor is referred to as forward signaling while the signaling pathway downstream of the ephrin ligand is referred to as reverse signaling. Activated by the ligand ephrin-A1/EF1 regulates migration, integrin-mediated adhesion, proliferation and differentiation of cells. Regulates cell adhesion and differentiation through DSG1/desmoglein-1 and inhibition of the ERK1/ERK2 (MAPK3/MAPK1, respectively) signaling pathway. Engaged by the ligand ephrin-A5/EF5 may regulate lens fiber cells shape and interactions and be important for lens transparency development and maintenance. With ephrin-A2/EF2 may play a role in bone remodeling through regulation of osteoclastogenesis and osteoblastogenesis.
Form	Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Bio-activity	Immobilized Human Ephrin-A1, Fc Tag at 5 µg/mL (100 µL/well) can bind Rat EphA2 Protein, His Tag with a linear range of 0.01-0.156.
Molecular Mass	The protein has a calculated MW of 58.6 kDa. The protein migrates as 60-67 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.
Endotoxin	Less than 1.0 EU/µg by the LAL method/rFC method.
Purity	>95% as determined by SDS-PAGE. >90% as determined by SEC-MALS.
Storage	This product is stable after storage at: -20 to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution. For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 µg/µL. Centrifuge the vial at 4 centigrade before opening to recover the entire contents.

GENE INFORMATION

Gene Name	Epha2 Eph receptor A2 [Rattus norvegicus]
Official Symbol	Epha2
Synonyms	EPHA2; Eph receptor A2; ephrin type-A receptor 2; ephrin receptor EphA2;
Gene ID	366492
mRNA Refseq	NM_001108977

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Protein Refseq	NP_001102447
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UniProt ID	D3ZBN3
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