

# Recombinant Human EPHA2 Receptor A2, His-tagged

**Cat. No.** EPHA2-541H    **Lot. No.** (See product label)

## SPECIFICATION

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b>  | Recombinant human EPHA2 was expressed by baculovirus in <i>Sf9 insect cells</i> using an N-terminal His tag. MW=47kDa.                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Species</b>           | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Source</b>            | Sf9 Cells                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Description</b>       | EPHA2 is a member of the ephrin receptor subfamily of protein-tyrosine kinases that bind the ephrin-A ligand and have diverse cellular function. EPHA2 has been shown to be an oncoprotein of importance in a range of cancers. EPHA2 is overexpressed in several human cancer types and promotes malignancy through a mechanism involving RhoA-dependent destabilization of adherens junctions. EPHA2 overexpression induces a FAK-dependent increase in MMP-2 expression and invasiveness and this process that can be reversed by ligation of EPHA2. |
| <b>Purity</b>            | >90%.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Specific Activity</b> | 170 U/mg. One unit is defined as the amount of enzyme that will phosphorylate 1 nmol of tyrosine substrate per minute at pH 7.4 and 30°C. Assay buffer: 50 mM HEPES, pH 7.4, 3 mM MgCl <sub>2</sub> , 3 mM MnCl <sub>2</sub> , 1 mM DTT, 3 μM Na-orthovanadate, 0.1 mM ATP, 30 μg/ml Poly (Glu:Tyr) 4:1 substrate, and 0.1 μg /ml recombinant EPHB2.                                                                                                                                                                                                    |
| <b>Application</b>       | Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Formulated In</b>     | 50mM Tris-HCl, pH 7.5, 150mM NaCl, 0.25mM DTT, 0.1mM EGTA, 0.1mM EDTA,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

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

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

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

0.1mM PMSF, 50% glycerol and 3mM DTT.

**Stability** >12 months at –80°C.

## GENE INFORMATION

**Gene Name** EPHA2 EPH receptor A2 [ Homo sapiens ]

**Synonyms** EPHA2; EPH receptor A2; ECK; ARCC2; protein tyrosine kinase; soluble EPHA2 variant 1; soluble EPHA2 variant 1; epithelial cell receptor protein tyrosine kinase; ephrin receptor EphA2; EC 2.7.10.1

**Gene ID** 1969

**mRNA Refseq** NM\_004431

**Protein Refseq** NP\_004422

**MIM** 176946

**UniProt ID** P29317

**Chromosome Location** 1p36

**Pathway** Axon guidance

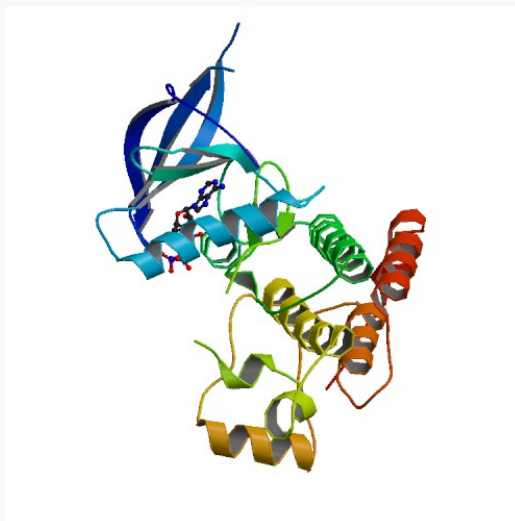
**Function** ATP binding; ephrin receptor activity; nucleotide binding; protein binding; receptor activity; transferase activity

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

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

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

PDB rendering based  
on 1mqb.



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

Email: [info@creative-biomart.com](mailto:info@creative-biomart.com) Fax: 1-631-938-8127

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