

## Recombinant Human EphA2

Catalog No: CP37

<b>Description</b>	Recombinant Human Ephrin type-A receptor 2 is produced by our Mammalian expression system and the target gene encoding Ala24-Asn534 is expressed with a Fc tag at the C-terminus.
<b>Source</b>	Human Cells
<b>Alternative name</b>	Ephrin type-A receptor 2, Epithelial cell kinase, Tyrosine-protein kinase receptor ECK, EPHA2
<b>Accession No.</b>	P29317
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.
<b>Quality Control</b>	Purity: Greater than 95% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
<b>Storage</b>	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Amino Acid Sequence</b>	AQGKEVLLDFAAAGGELGWLTHPYGKGWDLMQNIMNDMPIYMSVCNVMMSGDQDNWLRTNWWYR GEAERIFIELKFTVRDCNSFPGGASSCKETFNLYYAESLDYGTNFQKRLFTKIDTIAPDEITVSSDFEAR HVKLNVEERSVGPLTRKGFYLAFAQDIGACVALLSVRVYYKKCEPELLQGLAHFETIAGSDAPSLATVAGT CVDHAVVPPGGEEPRMHCAVDGEWLVPIGQCLCQAGYEKVEDACQACSPGFFKFEASESPCLECPEH TLPSPGATSCCEEGFFRAPQDPASMPCTRPSPAPHYLTAAGMGAKVELRWTPPQDSGGREDIVYS VTCEQCWPESGECGPCEASVRYSEPPHGLTRTSVTVSDLEPHMNYFTTVEARNGVSGLVTSRSFRTA SVSINQTEPPKVRLEGRSTTSLSVSWSIPPPQQSRVWKYEVTYRKKGDSNSYNVRTEGFSVTLDDLA PDTTYLVQVQALTQEGQGAGSKVHEFQTLSPGSGNDIEGRMDPKSCDKTHTCPPCPAPELLGGPSV FLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVL HQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIA VEWESNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSSVMHEALHNHYTQKSLSLSP GK
<b>Background</b>	Ephrin type-A receptor 2/EphA2 is a member of the Eph receptor tyrosine kinase family which binds Ephrins A1, 2, 3, 4, and 5. A and B class Eph proteins have a common structural organization. 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. EphA2 becomes autophosphorylated following ligand binding and then interacts with SH2 domain-containing PI3-kinase to activate MAPK pathways. Reverse signaling is also propagated through the Ephrin ligand. Transcription of EphA2 is dependent on the expression of E-Cadherin, and can be induced by p53 family transcription factors. EphA2 is upregulated in breast, prostate, and colon cancer vascular endothelium. Its ligand, EphrinA1, is expressed by the local tumor cells. In some cases, EphA2 and EphrinA1 are expressed on the same blood vessels. EphA2 signaling cooperates with VEGF receptor signaling in promoting endothelial cell migration.

### SDS-Page

