

Recombinant EPHA5 (620-1037) protein

Catalog No: 81495, 81595

Expressed In: Baculovirus

Quantity: 20, 1000 µg

Concentration: 0.1 µg/µl

Source: Human

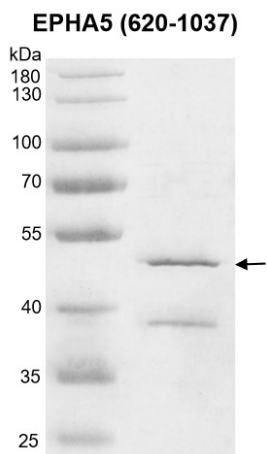
Buffer Contents: Recombinant EPHA5 (620-1037) protein is supplied 25 mM HEPES pH 7.5, 300 mM NaCl, 20% glycerol, 0.04% Triton X-100, 0.5 mM TCEP

Background: **EPHA5 (Ephrin type-A receptor 5)** is a receptor tyrosine kinase which binds promiscuously GPI-anchored 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. Among GPI-anchored ephrin-A ligands, EFNA5 most probably constitutes the cognate/functional ligand for **EPHA5**. Functions as an axon guidance molecule during development and may be involved in the development of the retinotectal, entorhino-hippocampal and hippocamposeptal pathways. Together with EFNA5 also plays a role in synaptic plasticity in adult brain through regulation of synaptogenesis. In addition to its function in the nervous system, the interaction of **EPHA5** with EFNA5 mediates communication between pancreatic islet cells to regulate glucose-stimulated insulin secretion.

Protein Details: Recombinant EPHA5 (620-1037) protein that includes amino acids 620-1037 of human EPHA5 protein (accession number NP_004430.4) was expressed in a baculovirus expression system, and contains an N-terminal FLAG tag. The molecular weight of the protein is 48.41 kDa.

Application Notes: This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.

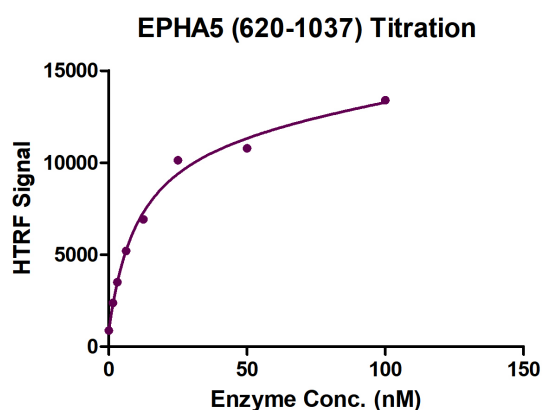


Recombinant EPHA5 (620-1037) protein

10% SDS-PAGE Coomassie staining

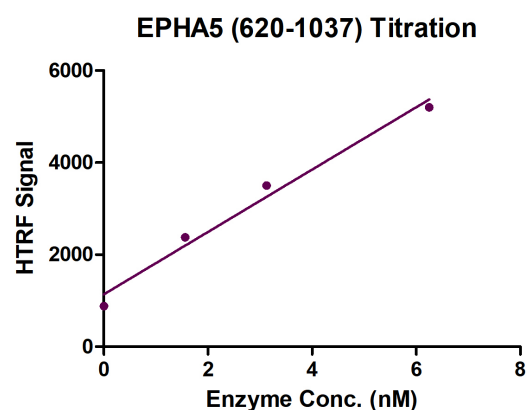
MW: 48.41 kDa

Purity: $\geq 85\%$



HTRF assay for EPHA5 (620-1037) activity

1 μ M TK substrate was incubated with different concentrations of EPHA5 (620-1037) protein in a 10 μ l reaction system containing 1 \times Enzymatic Buffer, 5 mM MgCl₂, 1mM MnCl₂, 1 mM DTT, 5nM SEB and 100 μ M ATP for 1 hour. Then 10 μ l detection reagents containing anti-TK antibody (1:2) and SA-XL665 (1:100) diluted with 1 \times Detection Buffer were added and incubated with the reactions for 30 min. All the operations and reactions were performed at room temperature. HTRF assay was used for detection.



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