

Human EPHB2 Protein

Cat. No. EPH-HM101



Description

Source	Recombinant Human EPHB2 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Val19-Leu543.
Accession	P29323-1
Molecular Weight	The protein has a predicted MW of 59.2 kDa. Due to glycosylation, the protein migrates to 65-75 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.1 EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

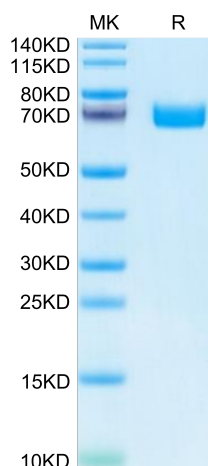
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

EphB2, a receptor tyrosine kinase for ephrin ligands, is overexpressed in various cancers and plays an important role in tumor progression. EPHB2 promotes endothelial-mesenchymal transition (EMT) and elicits associated pathologic characteristics of glioblastoma multiforme (GBM) such as invasion and migration. EPHB2 is epigenetically overexpressed in hypoxia, a condition highly prevalent in malignancy. Furthermore, HIF-2 α is required for EPHB2 stabilization by hypoxia.

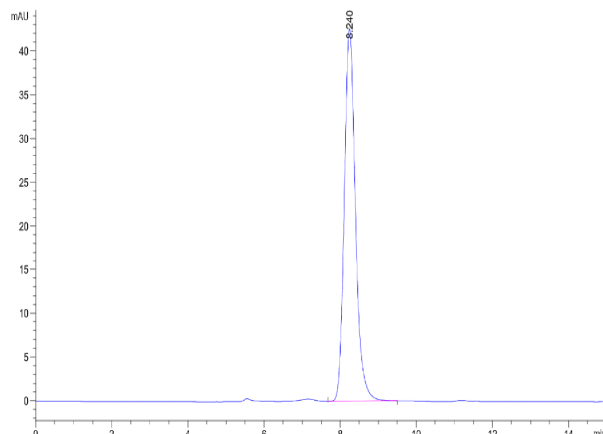
Assay Data

Bis-Tris PAGE



Human EPHB2 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



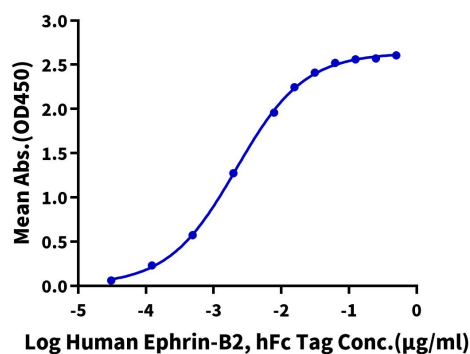
The purity of Human EPHB2 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human EPHB2, His Tag ELISA

0.2µg Human EPHB2, His Tag Per Well

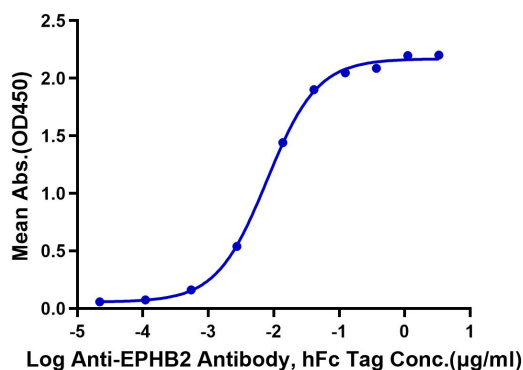


Immobilized Human EPHB2, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Human Ephrin-B2, hFc Tag with the EC50 of 2.2ng/ml determined by ELISA (QC Test).

ELISA Data

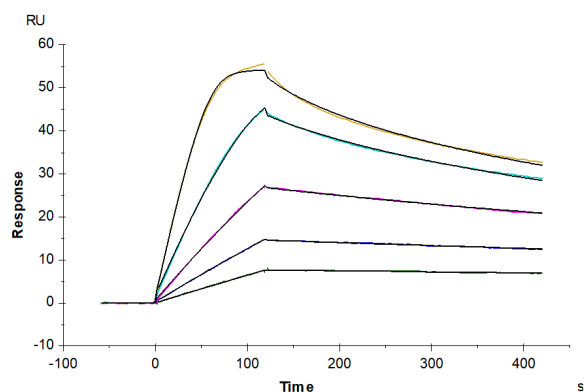
Human EPHB2, His Tag ELISA

0.05µg Human EPHB2, His Tag Per Well



Immobilized Human EPHB2, His Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Anti-EPHB2 Antibody, hFc Tag with the EC50 of 8.0ng/ml determined by ELISA.

SPR Data



Human Ephrin-B2, hFc Tag captured on CM5 Chip via Protein A can bind Human EPHB2, His Tag with an affinity constant of 82.97 pM as determined in SPR assay (Biacore T200).