
Product Name: Human EphA2 Protein Dimer, His Tag

Product Code: CSP-26324-01

FOR RESEARCH USE ONLY (RUO)

Protein Name: EphA2, Protein Dimer

Alternate Name(s): EPH receptor A2, AW545284, Myk2, Sek-2, Sek2, ARCC2, CTPA, CTPP1, CTRCT6, ECK

Expression Host
HEK293T

Amino Acid Range
A24 - V537

Protein Construct

EphA2 dimer protein contains an EphA2 extracellular domain (UniProt# P29317) fused with a proprietary cis-dimer motif followed by a His tag at the C-terminus. Expressed in HEK293T cell line.

SDS-Page Molecular Weight

129 kDa. The migration range of the dimer protein with glycosylation under non-reducing conditions is 120-190 kDa on SDS PAGE.

Purity

Greater than 90% dimer form as determined by SDS-PAGE under non-reducing condition

Shipping Conditions

Frozen Ice Packs

Stability & Storage

-20°C

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4 with 10% trehalose as protectant

Reconstitution of lyophilized product

For best performance, we strongly recommend you reconstitute the lyophilized product with deionized water to a stock solution of 500 µg/mL.

Solubilize for 20 minutes at room temperature with occasional gentle mixing. Avoid shaking or vortexing.

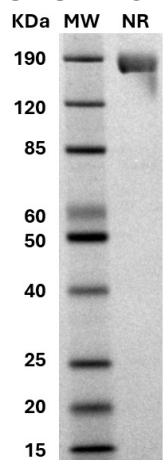
For 25µg product size:

Reconstitute with 50 µL sterile deionized water.

For 100µg product size:

Reconstitute with 200 µL sterile deionized water.

SDS-PAGE

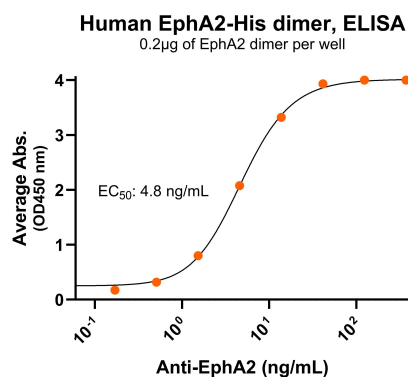


MW: Molecular Weight marker reduced condition

NR: EphA2 dimer under non-reducing condition

The migration range of the dimer protein with glycosylation under non-reducing conditions is 120-190 kDa on SDS PAGE.

Antibody Binding



Immobilized human EphA2 dimer protein, His Tag (Cat. No. CSP-26324-01) at 2 µg/mL (100 µL/well) can bind anti-human EphA2 monoclonal antibody, with half maximal effective concentration (EC₅₀) range of 2.4-9.6 ng/mL (QC tested).

Background

Human ephrin type-A receptor 2 (EphA2) is a Type I transmembrane protein and a member of the ephrin receptor subfamily, representing the largest subfamily of receptor tyrosine kinase (RTK) family. EphA2 is also known as EPH receptor A2. EphA2 contains an extracellular domain consisting of a Cys-rich domain and 2 fibronectin type III repeats. It is highly conserved and primarily acts as a gatekeeper for cell-to-cell communication, regulating tissue development, cell migration, and structural homeostasis. The dimerization of EphA2 serves as the primary structural gateway controlling its dual roles as a tumor suppressor and an oncogene. EphA2 binds ephrin-A ligands residing on adjacent cells, leading to contact-dependent signaling into neighboring cells. EphA2 is a receptor by which Kaposi's sarcoma-associated herpesvirus (KSHV) enters host cells and is a prognostic marker in some cancers, making it an emerging target for therapeutics.