Bioactive, Recombinant Human FGFR4 Protein Dimer, His-Avi Tag
Product Code: CSP-25132-03
For Research Use Only (RUO)

Protein Name
FGFR4

Alternate Name(s)
FGFR-4, cluster of differentiation 334, CD334, JTK2, TKF

Protein Construct
FGFR4 dimer protein contains a FGFR4 extracellular domain (UniProt# P22455) fused with a dimer motif followed by a tandem His-Avi tag at the C-terminus. Expressed in HEK293T cell line.

SDS-Page Molecular Weight
97 kDa. The migration range of the dimer protein with glycosylation under non-reducing conditions is ~190 kDa on SDS PAGE.

Shipping Conditions
Frozen Dry Ice

Expression Host
HEK293T

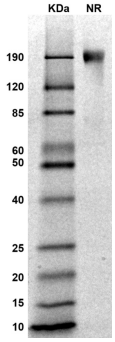
Purity
Greater than 90% dimer form as determined by SDS-PAGE under non-reducing condition

Amino Acid Range
L22-D369

Formulation
0.22µm filtered PBS, pH 7.4

Stability & Storage
-80^{0}C

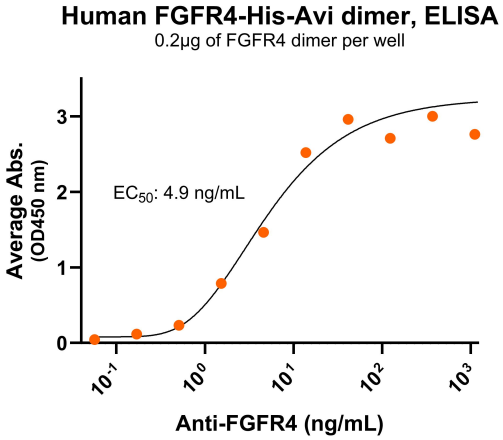
SDS-PAGE



MW: Molecular Weight marker reduced condition
NR: FGFR4 dimer under non-reduced condition

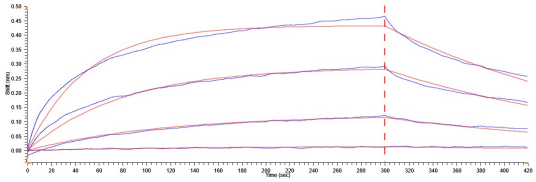
The migration range of the dimer protein with glycosylation under non-reducing conditions is ~190 kDa on SDS PAGE.

Bioactivity – Antibody Binding



Immobilized human FGFR4-His-Avi dimer protein (CSP-25132-03) at 2 μg/mL (100 μL/well) can bind anti-human FGFR4 polyclonal antibody with half maximal effective concentration (EC50) range of 2.4-9.7 ng/mL (QC tested).

Bioactivity – BLI



Human FGFR4 dimer protein, His-Avi tag (Cat. No. CSP-25132-03) on a NiNTA probe can bind human FGF-1 ligand with a KD of 118.5-474 nM as determined by BLI.

Background

Human fibroblast growth factor receptor 4 (FGFR4) is a cell surface receptor belonging to the immunoglobulin superfamily and a transmembrane receptor tyrosine kinase (RTK) that belongs to the FGFR family. FGFR4 is also known as cluster of differentiation 334 (CD334), JTK2, and TKF. FGFR4 contains an extracellular domain with three immunoglobulin-like (Ig-like) subdomains (D1, D2 and D3), followed by a transmembrane, and an intracellular domain. Dimerization of FGFRs is necessary for activation and they can homodimerize and heterodimerize in both the presence and absence of ligand. FGFRs bind fibroblast growth factors (FGFs) leading to phosphorylation and triggering signaling cascades. FGFR4 has been implicated in oncogenesis, tumor progression, and resistance to anti-tumor therapy in multiple types of cancer making it an emerging target for cancer therapeutics.