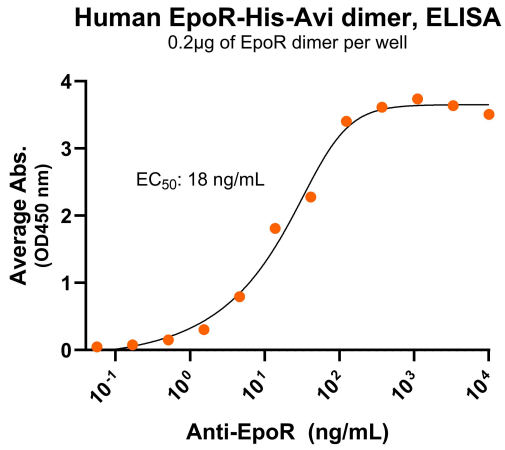
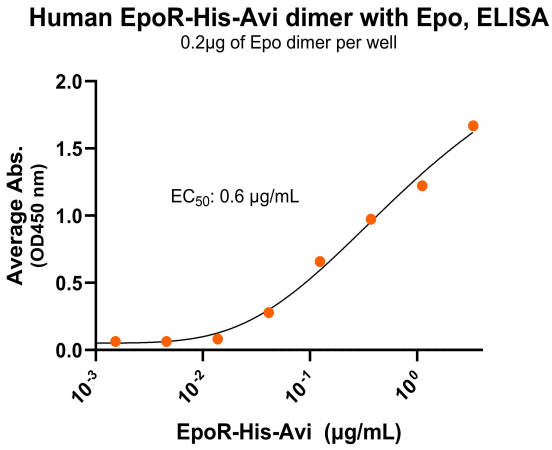
Bioactive, Human EpoR Dimer, His-Avi Tag
Product Code: CSP-24087
For Research Use Only (RUO)

Bioactivity – Antibody Binding



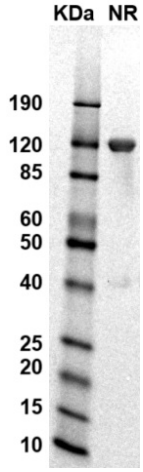
Immobilized human EpoR-His-Avi dimer protein (CSP-24087) at 2 μg/mL (100 μL/well) can bind anti-human EpoR monoclonal antibody with half maximal effective concentration (EC50) range of 9.1-36.2 ng/mL (QC tested).

Bioactivity – Ligand Binding



Immobilized human Epo at 2 μg/mL (100 μL/well) can bind EpoR-His-Avi dimer protein (CSP-24087) with half maximal effective concentration (EC50) range of 0.3-1.2 μg/mL (QC tested).

SDS-PAGE



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

The migration range of the dimer protein with glycosylation under non-reducing conditions is 115-125 KDa on SDS PAGE.

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Expression Host
HEK293T

Protein Name
EpoR

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

Alternate Name(s)
EPOR, EPO-R, CD131

Protein Construct
EpoR dimer protein contains an EpoR extracellular domain (UniProt# P19235) fused with a proprietary dimer motif followed by a tandem His-Avi tag at the C-terminus. Expressed in HEK293T cell line.

Amino Acid Range
A25-P250

SDS-Page Molecular Weight
70 kDa. The migration range of the dimer protein with glycosylation under non-reducing conditions is 115-125 KDa on SDS PAGE.

Formulation
0.22µm filtered PBS, pH 7.4

Shipping Conditions
Frozen Dry Ice

Stability & Storage
-80^0C

Background

Human erythropoietin receptor (EpoR), also known as EPO-R and CD131, is a transmembrane protein found on the surface of erythropoietin (Epo) responding cells. EpoR belongs to the type I cytokine receptor family. EpoR contains an extracellular domain with two fibronectin type II domains, a transmembrane domain, a juxtamembrane region, and a cytoplasmic region. It functions as a homodimer to form an active receptor complex upon ligand binding that is crucial for receptor activation and downstream signaling. EpoR dysregulation is involved in blood disorders including the development of erythroleukemia and familial erythrocytosis. Therefore, a recombinant protein mimicking the EpoR dimer conformation can be crucial for therapeutic discovery.