Recombinant Human Angiopoietin-like Protein 2/ANGPTL2 C-Terminal Fragment

Catalog Number: 9795-AN

DESCRIPTION

Source	Chinese Hamster Ovary cell line, CHO-derived human Angiopoietin-like Protein 2/ANGPTL2 protein Thr260-His493, with a C-terminal 6-His tag Accession # Q9UKU9.1
N-terminal Sequence Analysis	Thr260
Predicted Molecular Mass	28 kDa

SPECIFICATIONS

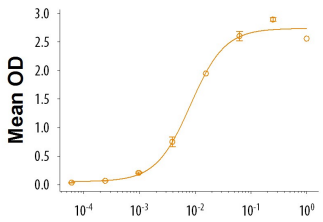
SDS-PAGE	28-36 kDa, under reducing conditions.
Activity	Measured by its binding ability in a functional ELISA. When Recombinant Human Angiopoietin-like Protein 2/ANGPTL2 is immobilized at 1 µg/mL, 100 µL/well, the concentration of Recombinant Human LILRB2/CD85d/ILT4 Fc Chimera Recombinant Human ILT4/CD85d Fc Chimera (Catalog # 2078-T4) that produces 50% of the optimal binding response is 6-48 ng/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 500 µg/mL in PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 3 months, -20 to -70 °C under sterile conditions after reconstitution.

DATA

Binding Activity



Recombinant Human Angiopoietin-like Protein 2/ANGPTL2 Binding Activity
When Recombinant Human Angiopoietin-like Protein 2/ANGPTL2 (Catalog # 9795-AN) is immobilized at 1 µg/mL, 100 µL/well, Recombinant Human ILT4/CD85d Fc Chimera (Catalog # Catalog # 2078-T4) binds with an ED_{50} of 6-48 ng/mL.

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BACKGROUND

Angiopoietin-like Protein 2 (ANGPTL2), also known as ARP2 is a secreted 56 kDa glycoprotein that contains a N-terminal coiled coil domain and a C-terminal fibrinogen like domain (1). ANGPTL2 is one of the seven members of the Angiopoietin Like family proteins, which are structurally similar to angiopoietins (2). Within mature human ANGPTL2, amino acid 260-493 contains the C-terminal fibrinogen like domain, and this domain shares 99% sequence identity with both mouse and rat homologs. ANGPTL2 is widely expressed in many tissues, and its expression is induced by chronic, but not acute hypoxia (3). Elevated level of ANGPTL2 in the serum is also correlated with inflammation and obesity (3). ANGPTL2 has both pro and anti-angiogenic functions (1, 4). It serves as tumor suppressor in ovarian cancer (5), and also promote metastasis in various cancer types, making it potential biomarker for tumor progression (6-7). ANGPTL2 also function as growth factor to enhance the survival of hematopoietic progenitors, mediated by its coiled coil domain (8). Receptor of ANGPTL2 is recently identified as LILRB2, and both the coiled coil domain and fibrinogen like domain are required for optimal binding (9).

References:

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