Data Sheet (Cat.No.TMPK-00299)

TargetMol

ANGPTL2 Protein, Human, Recombinant (His & Avi), Biotinylated

General Information

Synonyms:	MGC8889;ANGRP2;angiopoietin-like 2;ANGPTL2;HARP;ARP2
Protein Construction:	Thr260-His493
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q9UKU9-1
Molecular Weight:	30.1 kDa (predicted). Due to glycosylation, the protein migrates to 31-35 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	Human LILRB2, hFc Tag captured on CM5 Chip via Protein A can bind Biotinylated Human ANGPTL2, His Tag with an affinity constant of 65.63 nM as determined in SPR assay.
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, 200 mM L-arginine (pH 7.4). Typically, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Angiopoietin-like 2 (ANGPTL2) is a proinflammatory protein belonging to the angiopoietin-like family. ANGPTL2 is secreted and detected in the systemic circulation. Different observational clinical studies reported that circulating levels of ANGPTL2 increase significantly in various chronic inflammatory diseases and showed associations between ANGPTL2 levels and diagnosis and/or prognosis of cardiovascular diseases, diabetes, chronic kidney

disease, and various types of cancers.

Reference

Thorin-Trescases N, Thorin E. High Circulating Levels of ANGPTL2: Beyond a Clinical Marker of Systemic Inflammation. Oxid Med Cell Longev. 2017;2017:1096385. doi: 10.1155/2017/1096385. Epub 2017 Aug 24. PMID: 29138671; PMCID: PMC5613648.