

Human DDR1 Protein

Cat. No. DDR-HM1R1

Description

Source	Recombinant Human DDR1 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Asp21-Ala417.
Accession	Q08345-1
Molecular Weight	The protein has a predicted MW of 45.1 kDa. Due to glycosylation, the protein migrates to 63-67 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Discoidin domain receptor1 (DDR1) is a collagen activated receptor tyrosine kinase and an attractive anti-fibrotic target. Its expression is mainly limited to epithelial cells located in several organs including skin, kidney, liver and lung. DDR1's biology is elusive, with unknown downstream activation pathways; however, it may act as a mediator of the stromal-epithelial interaction, potentially controlling the activation state of the resident quiescent fibroblasts.

Assay Data

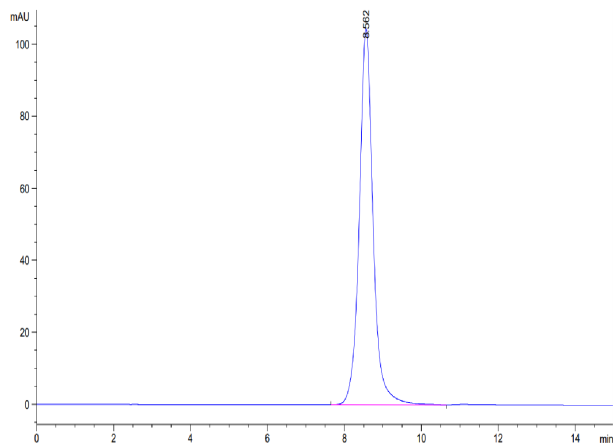
Bis-Tris PAGE



Human DDR1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

Assay Data



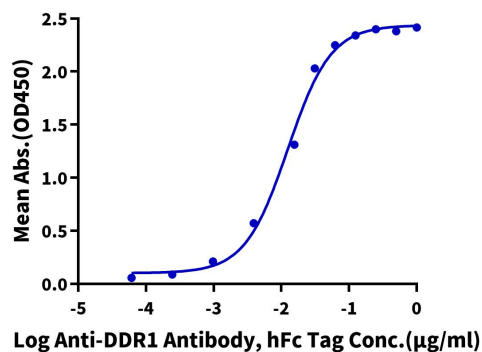
The purity of Human DDR1 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

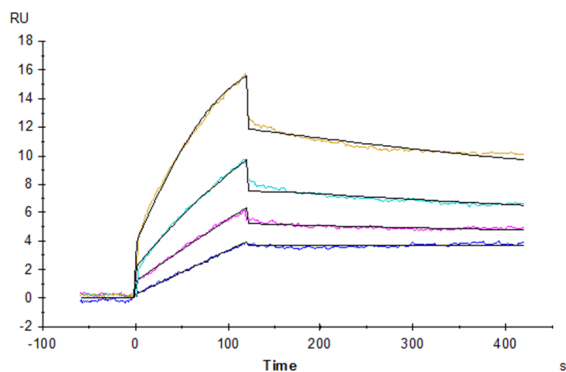
Human DDR1, His Tag ELISA

0.1µg Human DDR1, His Tag Per Well



Immobilized Human DDR1, His Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Anti-DDR1 Antibody, hFc Tag with the EC50 of 12.5ng/ml determined by ELISA (QC Test).

SPR Data



Human DDR1, His Tag captured on CM5 Chip via Anti-His Antibody can bind Native Human Collagen I protein with an affinity constant of 0.806 nM as determined in SPR assay (Biacore T200).