

# Human DDR1 Protein

Cat. No. DDR-HM1R1

## Description

<b>Source</b>	Recombinant Human DDR1 Protein is expressed from Expi293 with His tag at the C-terminal. It contains Asp21-Ala417.
<b>Accession</b>	Q08345-1
<b>Molecular Weight</b>	The protein has a predicted MW of 45.1 kDa. Due to glycosylation, the protein migrates to 63-67 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

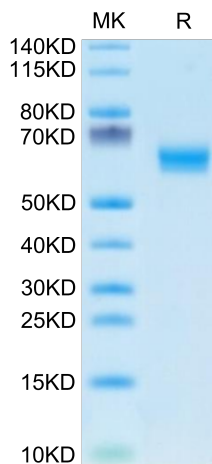
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge tubes before opening. Reconstituting to a concentration more than 100 µg/ml is recommended (usually we use 1mg/ml solution for lyophilization). Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please avoid 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

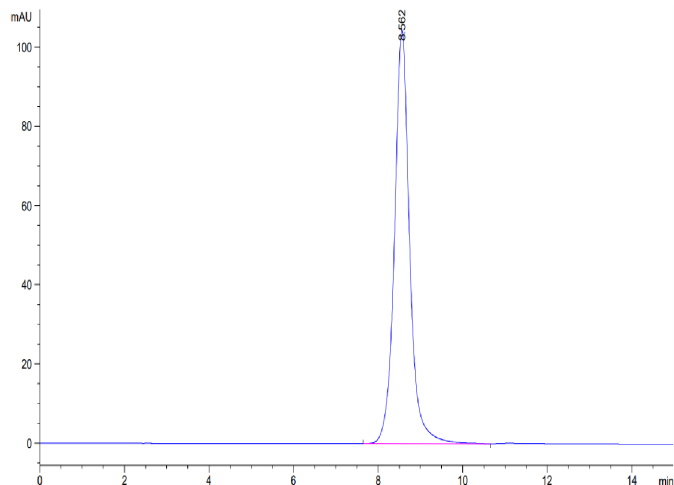
### Tris-Bis PAGE



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

### SEC-HPLC

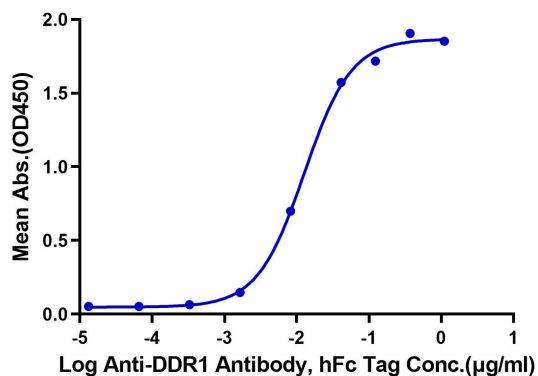
Assay Data



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

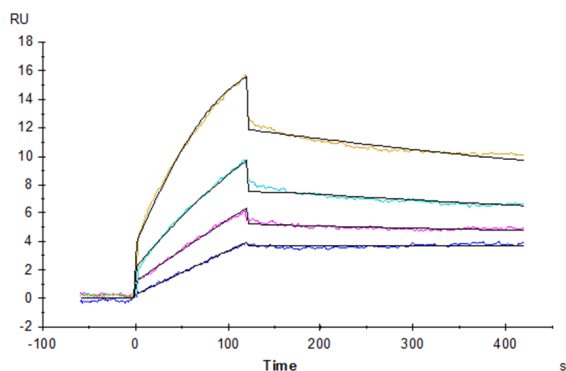
ELISA Data

**Human DDR1, His Tag ELISA**  
0.05µg Human DDR1, His Tag Per Well



Immobilized Human DDR1, His Tag at 0.5µg/ml (100µl/well) on the plate. Dose response curve for Anti-DDR1 Antibody, hFc Tag with the EC50 of 12.8ng/ml determined by ELISA.

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).