

# Human RNF43 Protein

Cat. No. RNF-HM143

## Description

<b>Source</b>	Recombinant Human RNF43 Protein is expressed from HEK293 with His tag at the C-terminus. It contains Gly24-Tyr197.
<b>Accession</b>	Q68DV7-1
<b>Molecular Weight</b>	The protein has a predicted MW of 20.14 kDa. Due to glycosylation, the protein migrates to 28-38 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

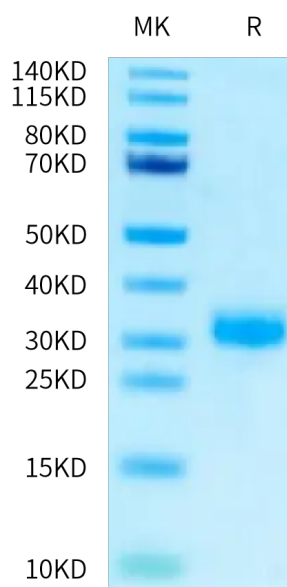
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended.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

## Background

RNF43 (E3 ubiquitin-protein ligase RNF43 or RING-type E3 ubiquitin transferase RNF43) functions as a tumor suppressor, by exerting a predominant negative feedback mechanism in the Wnt/ $\beta$ -catenin signaling pathway. RNF43 inhibits Wnt/ $\beta$ -catenin signaling by ubiquitinating Frizzled receptor and targeting it to the lysosomal pathway for degradation.

## Assay Data

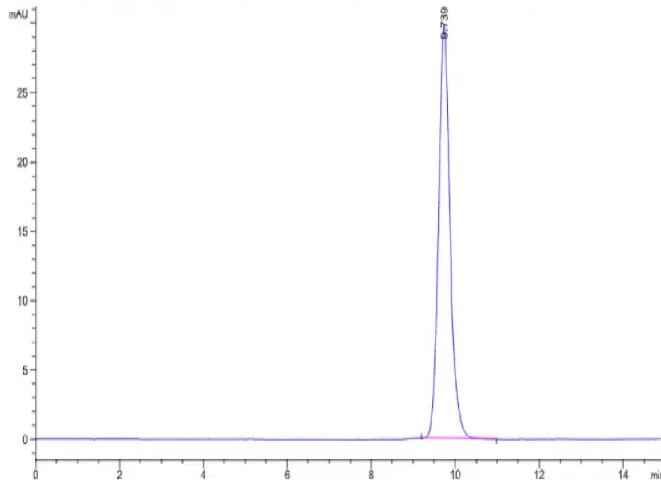
### Bis-Tris PAGE



Human RNF43 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

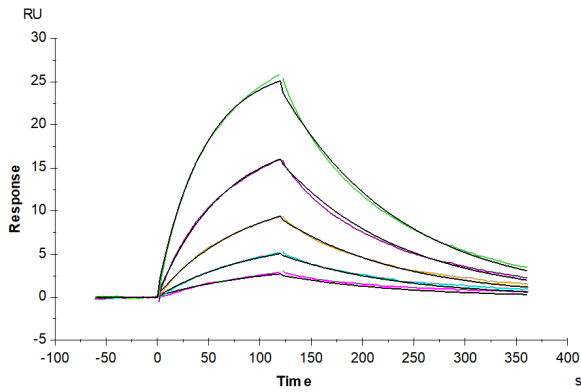
### SEC-HPLC

Assay Data



The purity of Human RNF43 is greater than 95% as determined by SEC-HPLC.

SPR Data



Human R-Spondin 3, His Tag immobilized on CM5 Chip can bind Human RNF43, His Tag with an affinity constant of 0.255  $\mu\text{M}$  as determined in SPR assay (Biacore T200).