

# Human FOLR4/Juno Protein

Cat. No. FOL-HM1R4

## Description

<b>Source</b>	Recombinant Human FOLR4/Juno Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Gly20-Ser228.
<b>Accession</b>	A6ND01-1
<b>Molecular Weight</b>	The protein has a predicted MW of 25 kDa. Due to glycosylation, the protein migrates to 30-35 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per ug by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

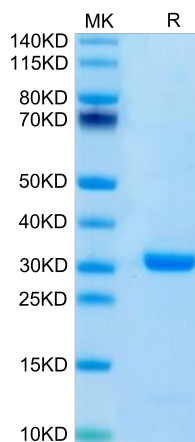
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein 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

Izumo1 is the only essential sperm-egg fusion protein currently known on mammalian sperm, and its egg receptor (Juno; formerly Folr4) was recently discovered. Male knockout mice for Izumo1 and female knockout mice for Juno are both healthy but sterile. Here, both sperm-egg binding proteins are shown to be evolving under positive selection. Juno's presence in mammals alone, suggesting a recent mammalian-specific duplication and neofunctionalization of the ancestral folate receptor.

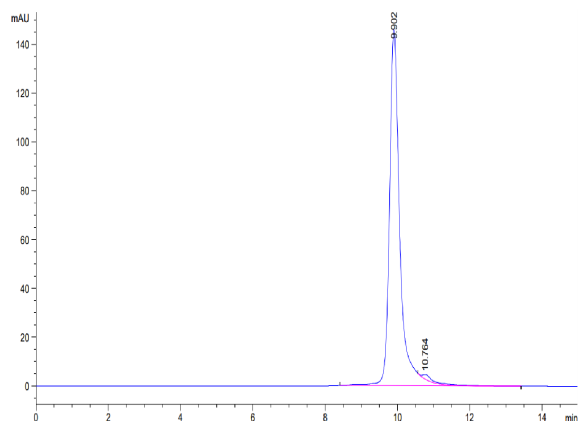
## Assay Data

### Bis-Tris PAGE



Human FOLR4 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



The purity of Human FOLR4 is greater than 95% as determined by SEC-HPLC.