

Human Wnt Surrogate-Fc Fusion Protein

Cat. No. WNT-HM23A

Description

Source	Recombinant Human Wnt Surrogate-Fc Fusion Protein is expressed from HEK293 with hFc tag at the C-Terminus.
Molecular Weight	The protein has a predicted MW of 58.50 kDa. Due to glycosylation, the protein migrates to 60-75 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE

Formulation and Storage

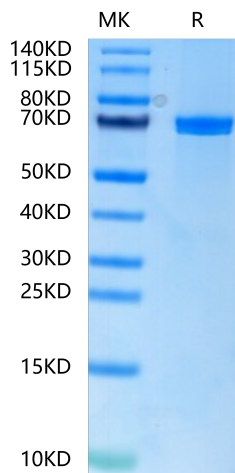
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-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 minimize freeze-thaw cycles.

Background

Wnt-3a is regarded as an activator of the canonical Wnt signaling pathway. This activator is expressed in the dorsal midline region and is responsible for spinal cord development. In addition, Wnt-3a plays a regulatory role in autophagy, apoptosis, and regeneration of neurons, neurogenic inflammation and axon regeneration. Wnt-3a promotes the beta-catenin/Tcf pathway which is tumor inducing and can cause cancer when expressed in particular cell populations. It is also one of the most commonly used cytokines for organoid construction.

Assay Data

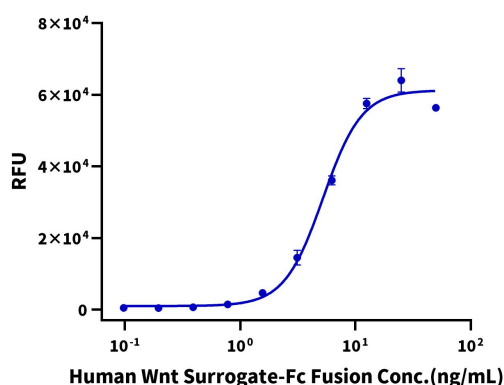
Tris-Bis PAGE



Human Wnt Surrogate-Fc Fusion on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

Cell Based Assay

Recombinant Human Wnt Surrogate-Fc Fusion Bioactivity



Measured by its ability to induce Topflash reporter activity in HEK293T human embryonic kidney cells. The ED50 for this effect is 5.2 ng/mL.