



Synonym

Wnt surrogate

Source

Recombinant Human Wnt3a Surrogate Protein is a engineered Wnt Surrogate Protein and is produced from human 293 cells (HEK293). It consists of the LRP-binding domain of DKK fused to a specific, high affinity binder of Frizzled receptors. Recombinant Human Wnt3a Surrogate Protein activates Wnt signaling pathways and is necessary for cell proliferation and differentiation and the self-renewal of stem cells. It is widely used for supporting organoid culture, including intestinal, stomach, liver, lung organoids.

Predicted N-terminus: Gly

It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.

Molecular Characterization

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 58.5 kDa. The protein migrates as 65-75 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Supplied as 0.2 µm filtered solution in 25 mM Tris, 500 mM NaCl, pH 8.2.

Contact us for customized product form or formulation.

Shipping

This product is supplied and shipped with dry ice, please inquire the shipping cost.

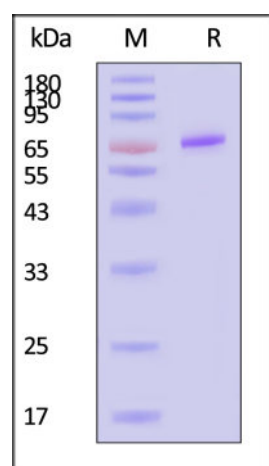
Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

SDS-PAGE



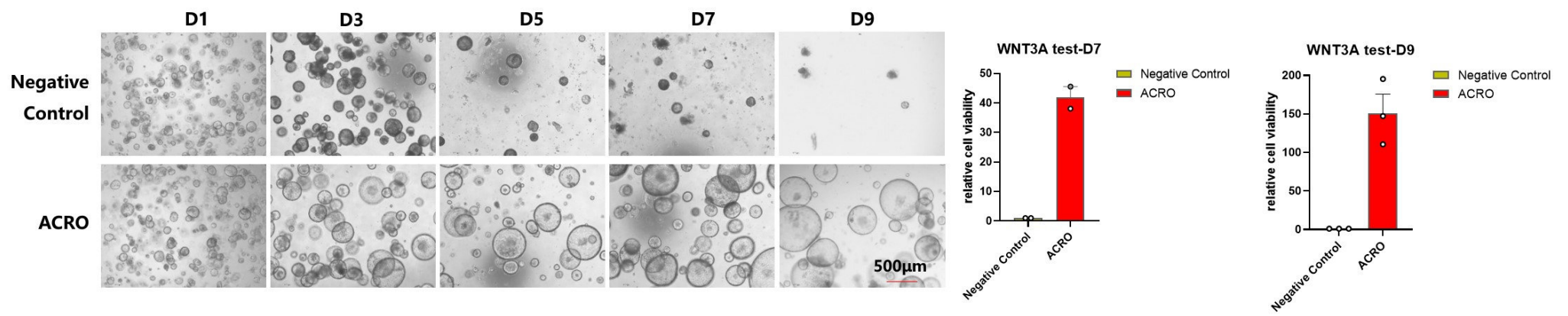
Recombinant Human Wnt3a Surrogate, premium grade on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

Discounts, Gifts,
and more!



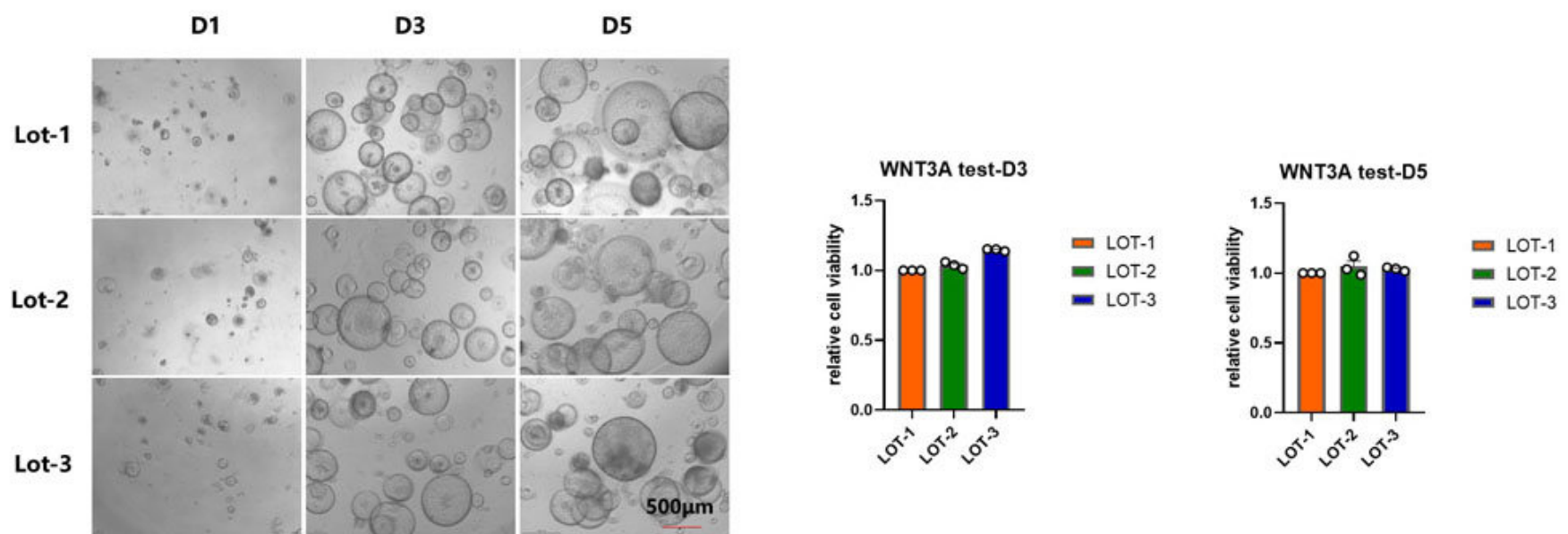


Bioactivity-Organoid Culture

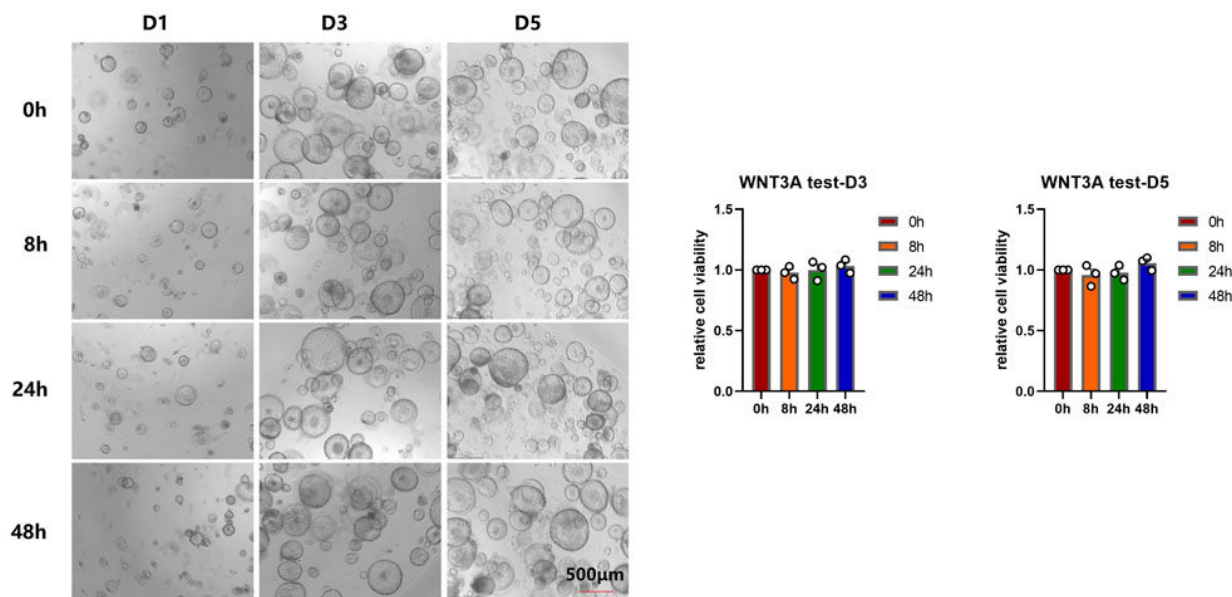


Wnt3a (WNE-W5253) maintains gastric organoid growth well during multiple passages and long-term culture processes. The organoids showed spheroid morphology.

Bioactivity-Stability



Wnt3a (WNE-W5253) maintains gastric organoid growth well during multiple passages and long-term culture processes and has good lot-to-lot consistency.



Wnt3a (Cat. No. WNE-W5253) shows good thermal stability in a 37 C accelerated experiment. After incubation for 48hrs at 37°C, Wnt3a (Cat. No. WNE-W5253) shows no performance decrease and still can maintain gastric organoid growth well.

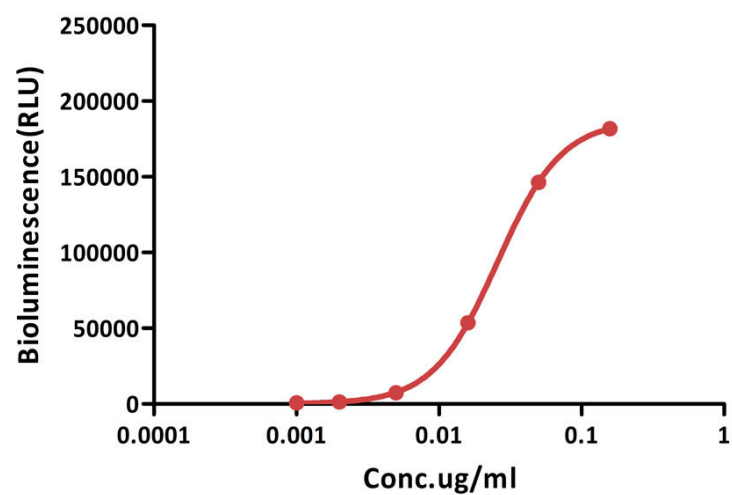
Bioactivity-Bioactivity CELL BASE

Discounts, Gifts, and more!





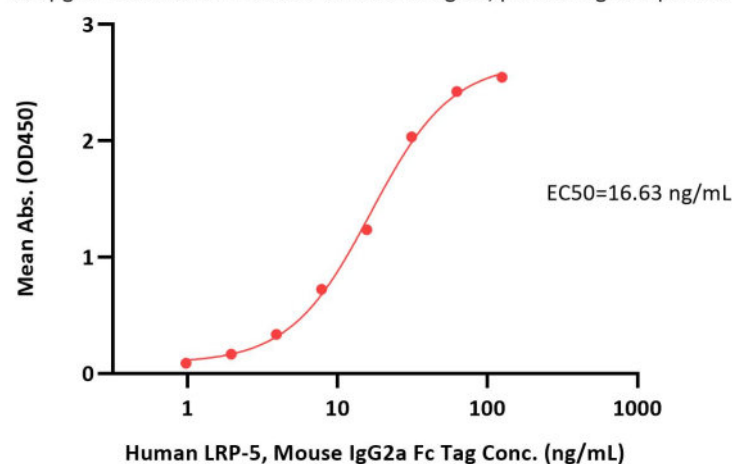
Recombinant Human Wnt3a Surrogate, premium grade



Recombinant Human Wnt3a Surrogate, premium grade (Cat. No. WNE-W5253) induced TCF reporter activity in HEK293 cells. The EC50 for this effect is 0.026 μg/mL (Routinely tested).

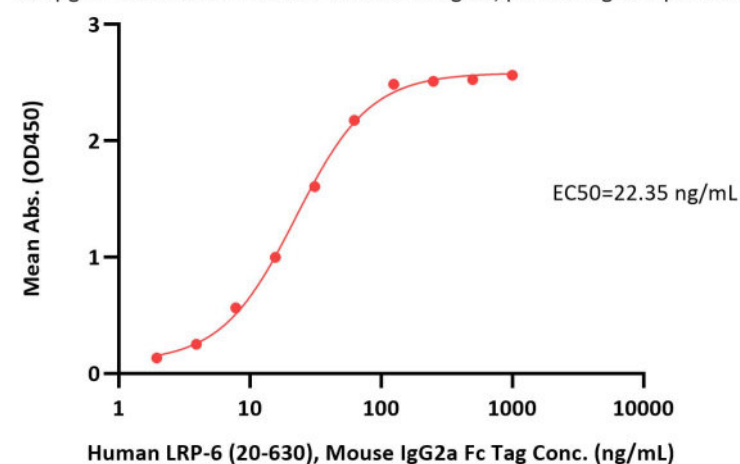
Bioactivity-ELISA

Recombinant Human Wnt3a Surrogate, premium grade ELISA
0.2 μg of Recombinant Human Wnt3a Surrogate, premium grade per well



Immobilized Recombinant Human Wnt3a Surrogate, premium grade (Cat. No. WNE-W5253) at 2 μg/mL (100 μL/well) can bind Human LRP-5, Mouse IgG2a Fc Tag (Cat. No. LR5-H5254) with a linear range of 1-31 ng/mL (QC tested).

Recombinant Human Wnt3a Surrogate, premium grade ELISA
0.2 μg of Recombinant Human Wnt3a Surrogate, premium grade per well



Immobilized Recombinant Human Wnt3a Surrogate, premium grade (Cat. No. WNE-W5253) at 2 μg/mL (100 μL/well) can bind Human LRP-6 (20-630), Mouse IgG2a Fc Tag (Cat. No. LR6-H5253) with a linear range of 2-31 ng/mL (Routinely tested).

Background

Wnt surrogate is a Wnt pathway agonists and related compositions, which may be used in any of a variety of therapeutic methods for the treatment of diseases.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.

Discounts, Gifts,
and more!

