Recombinant Human RSPO3 Protein (aa 1-146, His Tag)

Catalog Number: PKSH031223

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

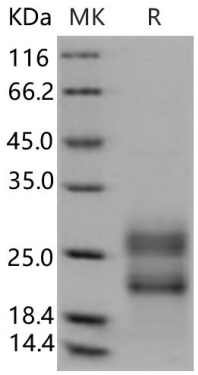
Description

Species	Human
Source	HEK293 Cells-derived Human RSPO3 protein Met 1-Val 146, with an C-terminal His
Calculated MW	15.3 kDa
Accession	Q9BXY4-1
Bio-activity	Immobilized RSPO3-His (146) at 10 μg/mL (100 μL/well) can bind human RNF43-Fc. The EC_{50} of human RNF43-Fc is 0.01-0.03μg/mL.

Properties

Purity	> 96 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 96 % as determined by reducing SDS-PAGE.

Background

R-spondin 3 (RSPO3) is a member of the R-Spondin (RSPO) family in vertebrates that activate Wnt/beta-catenin signaling; plays a key role in these processes. The RSPO family of secreted Wnt modulators is involved in development and disease and holds therapeutic promise as stem cell growth factors. The four members have high structural homology. RSPO2 and RSPO3 are more potent than RSPO1; whereas RSPO4 is relatively inactive. All RSPO members require Wnt ligands and LRP6 for activity and amplify signaling of Wnt3A; Wnt1; and Wnt7A; suggesting that RSPO proteins are general regulators of canonical Wnt signaling. RSPO3/PCP signaling during gastrulation requires Wnt5a and is transduced via Fz7; Dvl; and JNK. RSPO3 functions by inducing Sdc4-dependent; clathrin-mediated endocytosis. RSPO3 is a novel; evolutionarily conserved angiogenic factor in embryogenesis. RSPO3 has a key role in the interaction between chorion and allantois in labyrinthine development.

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