Recombinant Human RSPO3 Protein

Cat. No. RSPO3-35H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human R-spondin 3 protein without tag was expressed in E. coli. Animal-free (AOF) and carrier protein-free. Mass spectrometry: single species with expected mass. Analytical reversed-phase: single sharp peak. Recovery from stock vial: >95%
Species	Human
Source	E.coli
Description	This gene belongs to the R-spondin family. The encoded protein plays a role in the regulation of Wnt (wingless-type MMTV integration site family)/beta-catenin and Wnt/planar cell polarity (PCP) signaling pathways, which are involved in development, cell growth and disease pathogenesis. Genome-wide association studies suggest a correlation of this gene with bone mineral density and risk of fracture. This gene may be involved in tumor development.
Molecular Mass	17 kDa
Endotoxin	<0.005 EU/μg protein (below level of detection)
Applications	Intestinal organoid culture
Storage	Resuspend in 10mM HCl at >100 μg/mL, prepare single use aliquots, add carrier protein if desired and store frozen at -20 or -80 centigrade

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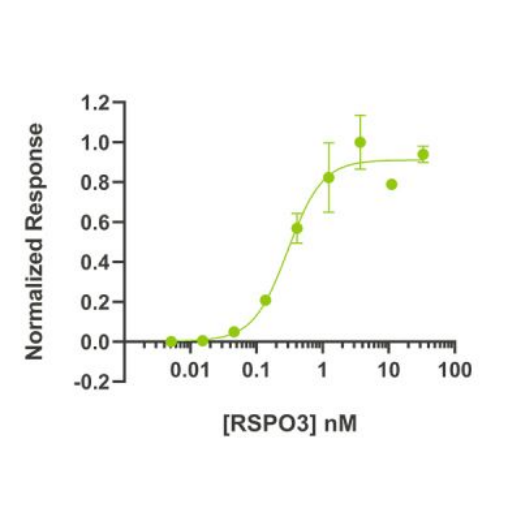
Storage Buffer	Lyophilized from acetonitrile, TFA

GENE INFORMATION

Gene Name	RSPO3 R-spondin 3 [Homo sapiens (human)]
Official Symbol	RSPO3
Synonyms	RSPO3; R-spondin 3; PWTSR; THSD2; CRISTIN1;
Gene ID	84870
mRNA Refseq	NM_032784
Protein Refseq	NP_116173
MIM	610574
UniProt ID	Q9BXY4

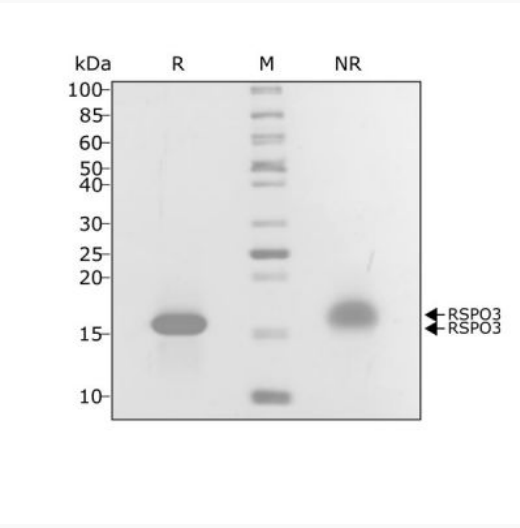
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Bioactivity



Bioactivity using a Wnt reporter assay in HEK293T cells. HEK293T cells transfected with Wnt-responsive firefly luciferase reporter TOPflash are treated with increasing concentrations of R-spondin 3 in the presence of Wnt-conditioned media (1: 8 dilution), in triplicate. The following day, luciferase activity is measured by luminescence. EC50 = 4.02 ng/mL (0.3 nM).

Purity



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R-spondin 3 bioactive domain migrates at 17 kDa in non-reducingconditions and upon reduction (+βME). Purified recombinant protein was resolved using 15% w/v SDS-PAGE in reducedand non-reduced conditionsand stained with Coomassie Brilliant Blue R250.

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