



Recombinant Human R-Spondin-1

20150227BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	100-130S
Size:	5 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	284654
Synonyms:	Roof plate-specific Spondin, Rspo1

R-Spondin-1 (Rspo-1) belongs to the (Rspo) family of Wnt modulators. Currently, the family consists of four structurally related secreted ligands (Rspo 1-4), all containing furin-like and thrombospondin structural domains. Rspo-1 is expressed in certain areas of the developing central nervous system, as well as in adrenal glands, ovary, testis, thyroid, and trachea. Rspo can interact with the Frizzled/LRP6 receptor complex in a manner that stimulates the Wnt/beta-catenin signaling pathway. Recombinant human R-Spondin-1 is a 26.7 kDa protein consisting of 243 amino acid residues. Due to glycosylation, R-Spondin-1 migrates at an apparent molecular weight of approximately 40.0 kDa by SDS PAGE analysis under reducing conditions.

Sequence

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SRGIKGRQRRI SAEGSQACAKGCELCSEVNGCLKCSPKLFILLERNDIRQV  
GVCLPSCPFGYFDARNPDMNKCIKCKIEHCEACFSHNFKCKEGLYLHKGR  
CYPACPEGSSAANGTMECS SPAQCEMSEWSPWGPCSKKQQLCGFRRGSEERT  
RRVLHAPVGDHAACSDTKETRRCTVRRVPCPEGQKRRKGGQGRRENANRNLA  
RKESKEAGAGSRRRKGQQQQQQQGTGVLTSAGPA
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Database References

Protein RefSeq:	NP_001033722.1
Uniprot ID:	Q2MKA7
mRNA RefSeq:	NM_001038633.3

Product Specifications

Expressed in	CHO cells
Purity	> 95% by SDS-PAGE & HPLC analyses
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	lyophilized
Length (aa):	243
MW:	26.7 kDa

Biological Activity: R-spondin-1 enhances BMP-2 mediated differentiation of MC3T3-E1 cells. The expected ED50 is 1.0-3.0 µg/ml.



AVOID REPEATED FREEZE AND THAW CYCLES!