R-Spondin-2 Human Chinese Hamster Ovary Cells (CHO)

Product Data Sheet

Type: Recombinant
Source: Chinese Hamster Ovary Cells (CHO)
Species: Human
Other names: Roof plate-specific, spondin-2, RSPO2

Cat. No.:

RBG10281005	(5 µg)
RBG10281020	(20 µg)
RBG10281100	(100 µg)

Description

The R-Spondin (Rspo) proteins belong 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. The Rspo proteins can interact with the Frizzled/LRP6 receptor complex in a manner that causes the stabilization, and resulting accumulation, of the intracellular signaling protein, beta-catenin. This activity effectively activates and increases the subsequent nuclear signaling of beta-catenin. R-Spondin can also bind to the previously discovered G-protein coupled receptors, LGR-4 and LGR-5. Rspo/beta-catenin signaling can act as an inducer of the transformed phenotype, and can also regulate the proliferation and differentiation of certain stem cell populations. Recombinant Human R-Spondin-2 is a 24.4 kDa protein consisting of 212 amino acid residues. Due to glycosylation, R-Spondin-2 migrates at an apparent molecular weight of approximately 30.0 kDa by SDS PAGE analysis under reducing conditions.

Research topic

Oncology

Amino Acid Sequence

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ASYVSNPICK GCLSCSKDNG CSRCQQKLFF FLRREGMRQY GECLHSCPSG YYGHRAPDMN RCARCRIENC DSCFSKDFCT
KCKVGFYLHR GRCFDECPDG FAPLEETMEC VEGCEVGHWS EWGTCSRNNR TCGFKWGLET RTRQIVKKPV KDTILCPTIA
ESRRCKMTMR HCPGGKRTPK AKEKRNKKKK RKLIERAQEQ HSVFLATDRA NQ
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Source

Chinese Hamster Ovary Cells (CHO)

Purity

95%

Biological Activity

R-Spondin-2 enhances BMP-2-mediated differentiation of MC3T3-E1 cells. The expected ED_{50} for this effect is 0.8 - 2.0 µg/ml.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-0.5 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at-20°C to -80°C.

Storage, Stability/Shelf Life

-20°C

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