

HumanKine® R-Spondin-1 (Recombinant Human)



Animal Component-Free

Human cell expressed

Tag-Free

Endotoxin Free

Product Description

R-Spondin 1 is an approximately 40kDa, glycosylated protein that serves as a major agonist of the Wnt signaling pathway. It regulates the turnover of the LRP6 co-receptor by preventing its internalization by DKK-1. R-Spondin 1 plays several roles in embryonic development including sex phenotype reversal, female sex determination, and ovarian differentiation. It also promotes stem cell turnover in the mammary glands, intestine, colon, and kidneys. Increased R-Spondin 1 expression has been linked to growth and migration of ovarian cancer cells as well as decreased sensitivity of gliomas to radiation-based therapies (PMID: 17804805, 22439850, 32749219, 30572097).

Alternative Names

Roof-plate specific spondin-1, Critsin3, RSPO1, HRspo1

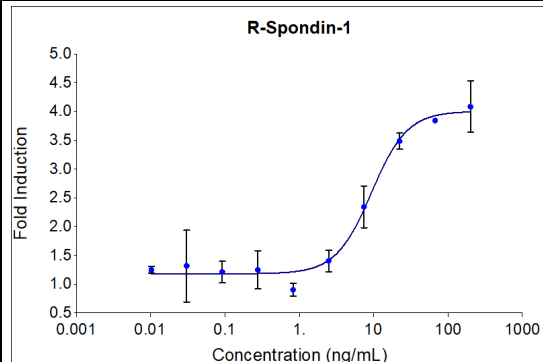
Source

Human Embryonic Kidney cells (HEK293). HEK293-derived R-Spondin-1 protein

Specifications

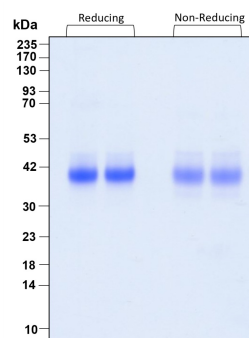
Test	Method	Specification
Activity	Does-dependent production of luciferase in a HEK293 TCF/LEF Reporter cell line	4-20 ng/mL
Molecular Mass	SDS-PAGE	36-50 kDa reduced and non-reduced, monomer, glycosylated
Purity	SDS-PAGE	>95%
Endotoxin	LAL	<1 EU/ µg

Activity Data



Recombinant human R-Spondin-1 (HZ-1328) induces dose-dependent luciferase production in a HEK293 TCF/LEF reporter cell line. Luciferase production was assessed by One-Step™ luciferase assay Kit. HEK293 TCF/LEF reporter cells were treated with increasing concentrations of recombinant R-Spondin-1 for 6 hours. The EC50 was determined using a 4-Parameter non-linear

SDS-PAGE



Preparation	
Shipping Temperature	ambient temperature
Formulation	1x PBS, See Certificate of Analysis for details
Reconstitution	Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein to 0.2 mg/mL in sterile 1x PBS pH 7.4 containing 0.1% endotoxin-free recombinant human serum albumin (HSA). Gently swirl or tap vial to mix.

Stability and Storage	Product Form	Temperature Conditions	Storage Time (From Date of Receipt)
	Lyophilized	-20°C to -80°C	Until Expiry Date
	Lyophilized	Room Temperature	2 weeks
	Reconstituted as per CofA	-20°C to -80°C	6 months
	Reconstituted as per CofA	4°C	1 week
Avoid repeated freeze-thaw cycles.			

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Proteintech Group, Inc.
5500 Pearl Street, Suite 400 Rosemont, IL 60612
t: 1-888-478-4522; f: 1-312-455-8408
Email: proteintech@ptglab.com