

Datasheet for ABIN2566884

RSP01 Protein (AA 21-146) (His tag)[Go to Product page](#)

Overview

Quantity:	0.05 mg
Target:	RSP01
Protein Characteristics:	AA 21-146
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This RSP01 protein is labelled with His tag.
Application:	Western Blotting (WB), ELISA

Product Details

Characteristics:	Measured by its binding ability in a functional ELISA. Immobilized human RSP01 at 20 µg/mL (100 µL/well) can bind human LIMP2 with a linear range of 12.5 - 1000 ng/mL.
Purity:	>95 % as determined by SDS-PAGE.

Target Details

Target:	RSP01
Alternative Name:	R Spondin 1 () (RSP01 Products)
Background:	R-spondin-1 is also known as Roof plate-specific Spondin 1 (RSP01) and cysteine-rich and single thrombospondin domain containing protein 3 (Cristin 3), is a secreted protein which belongs to the R-Spondin family and encodes a secreted activator protein with two cysteine-rich,

Target Details

furin-like domains and one thrombospondin type 1 domain. All Rspodins regulate Wnt/ β -catenin signaling, but have distinct expression patterns. Like other R-Spondins, R-Spondin-1 contains two adjacent cysteine-rich furin-like domains (aa 34-135) with one potential N-glycosylation site, followed by a thrombospondin (TSP1) motif (aa 147-207) and a region rich in basic residues (aa 211-263). Only the furin-like domains are needed for β -catenin stabilization. A putative nuclear localization signal at the C-terminus may allow some expression in the nucleus. Potential isoforms of 200 and 236 aa have an alternate, shorter N-terminus or are missing aa 146-208, respectively. R-Spondin-1 is expressed in early development at the roof plate boundary and is thought to contribute to dorsal neural tube development. Human RSP01 disruption results in a recessive syndrome characterized by XX sex reversal, palmoplantar hyperkeratosis and predisposition to squamous cell carcinoma of the skin. It has been shown that the complete female-to-male sex reversal is due to the absence of the testis-determining gene, SRY. R-Spondin-1 regulates Wnt/ β -catenin by competing with the Wnt antagonist DKK1 for binding to the Wnt co-receptors, Kremen and LRP6, reducing their DKK1-mediated internalization. Reports differ on whether R-spondin 1 binds LRP6 directly.

Molecular Weight:	16.7 kDa
Gene ID:	284654
UniProt:	Q2MKA7

Application Details

Application Notes:	This recombinant protein can be used for WB, ELISA. For research use only.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	PBS, pH 7.4
Storage:	-80 °C, -20 °C
Storage Comment:	Lyophilized Protein should be stored at -20°C or lower for long term storage. Upon reconstitution, working aliquots should be stored at -20°C or -70°C. Avoid repeated freeze-thaw cycles.