RSPO3 Blocking Peptide (C-Term)
Synthetic peptide
Catalog # BP21989b

Specification

RSPO3 Blocking Peptide (C-Term) - Product Information

Primary Accession   Q9BXY4

RSPO3 Blocking Peptide (C-Term) - Additional Information

Gene ID 84870

Other Names
R-spondin-3, Protein with TSP type-1 repeat, hPWTSR, Roof plate-specific spondin-3, hRspo3, Thrombospondin type-1 domain-containing protein 2, RSPO3, PWTSR, THSD2

Target/Specificity
The synthetic peptide sequence is selected from aa 217-230 of HUMAN RSPO3

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RSPO3 Blocking Peptide (C-Term) - Protein Information

Name RSPO3

Synonyms PWTSR, THSD2

Function
Activator of the canonical Wnt signaling pathway by acting as a ligand for LGR4-6 receptors, which acts as a key regulator of angiogenesis. Upon binding to LGR4-6 (LGR4, LGR5 or LGR6), LGR4-6 associate with phosphorylated LRP6 and frizzled receptors that are activated by extracellular Wnt receptors, triggering the canonical Wnt signaling pathway to increase expression of target genes. Also regulates the canonical Wnt/beta-catenin-dependent pathway and non- canonical Wnt signaling by acting as an inhibitor of ZNRF3, an important regulator of the Wnt signaling pathway. Acts as a ligand for frizzled FZD8 and LRP6. May negatively regulate the TGF-beta pathway (PubMed:21727895, PubMed:21909076, PubMed:22615920). Acts as a key regulator of angiogenesis by controlling vascular stability and pruning: acts by activating the non-canonical Wnt signaling pathway in endothelial cells (By similarity) (PubMed:<a

href="http://www.uniprot.org/citations/21727895" target="_blank">21727895, PubMed:<a
href="http://www.uniprot.org/citations/21909076" target="_blank">21909076, PubMed:<a
href="http://www.uniprot.org/citations/22615920" target="_blank">22615920). Can also
amplify Wnt signaling pathway independently of LGR4-6 receptors, possibly by acting as a direct
antagonistic ligand to RNF43 and ZNRF3 (PubMed:<a
href="http://www.uniprot.org/citations/29769720" target="_blank">29769720).

Cellular Location
Secreted {ECO:0000250|UniProtKB:Q2TJ95}.

Tissue Location
Ubiquitously expressed. Expressed at higher level in placenta, small intestine, fetal thymus and
lymph node (PubMed:12463421). Highly expressed in endothelial cells (PubMed:26766444).

RSPO3 Blocking Peptide (C-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

RSPO3 Blocking Peptide (C-Term) - Images

RSPO3 Blocking Peptide (C-Term) - Background

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pathway to increase expression of target genes. Also regulates the canonical
Wnt/beta-catenin-dependent pathway and non-canonical Wnt signaling by acting as an inhibitor of
ZNRF3, an important regulator of the Wnt signaling pathway. Acts as a ligand for frizzled FZD8 and
LRP6. May negatively regulate the TGF-beta pathway.

RSPO3 Blocking Peptide (C-Term) - References

 Chen J.-Z.,et al.Mol. Biol. Rep. 29:287-292(2002).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Mungall A.J.,et al.Nature 425:805-811(2003).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Kim K.-A.,et al.Cell Cycle 5:23-26(2006).