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Activin A Receptor Type IC (ACVR1C) Antibody (Center) Blocking peptide

Synthetic peptide
Catalog # BP7102b

Specification

Activin A Receptor Type IC (ACVR1C) Antibody (Center) Blocking peptide - Product Information

Primary Accession Q8NER5

Activin A Receptor Type IC (ACVR1C) Antibody (Center) Blocking peptide - Additional Information

Gene ID 130399

Other Names
Activin receptor type-1C, Activin receptor type IC, ACTR-IC, Activin receptor-like kinase 7, ALK-7, ACVR1C (HGNC:18123)

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7102b was selected from the Center region of human ACVR1C. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

Activin A Receptor Type IC (ACVR1C) Antibody (Center) Blocking peptide - Protein Information

Name ACVR1C (HGNC:18123)

Function
Serine/threonine protein kinase which forms a receptor complex on ligand binding. The receptor complex consisting of 2 type II and 2 type I transmembrane serine/threonine kinases. Type II receptors phosphorylate and activate type I receptors which autophosphorylate, then bind and activate SMAD transcriptional regulators, SMAD2 and SMAD3. Receptor for activin AB, activin B and NODAL. Plays a role in cell differentiation, growth arrest and apoptosis.

Cellular Location

Membrane; Single- pass type I membrane protein

Tissue Location
Present in pancreas, heart, colon, small intestine, ovary and the hippocampus, medulla oblongata and putamen of the brain Isoform 1, isoform 2, isoform 3 and isoform 4 are all expressed in the placenta throughout pregnancy.

Activin A Receptor Type IC (ACVR1C) Antibody (Center) Blocking peptide - Protocols

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

- Blocking Peptides

Activin A Receptor Type IC (ACVR1C) Antibody (Center) Blocking peptide - Images

Activin A Receptor Type IC (ACVR1C) Antibody (Center) Blocking peptide - Background

ACVR1C, a serine/threonine protein kinase, is a type I receptor for the TGFB family of signaling molecules. The receptor complex consisting of 2 type II and 2 type I transmembrane serine/threonine kinases. Type II receptors phosphorylate and activate type I receptors which autophosphorylate, then bind and activate SMAD transcriptional regulators, SMAD2 and SMAD3, which then translocate to the nucleus and interact directly with DNA or in complex with other transcription factors. ACVR1C is a receptor for activin AB, activin B and NODAL. This protein plays a role in cell differentiation, growth arrest and apoptosis.

Activin A Receptor Type IC (ACVR1C) Antibody (Center) Blocking peptide - References

Munir, S., et al., J. Biol. Chem. 279(30):31277-31286 (2004).Kim, B.C., et al., J. Biol. Chem. 279(27):28458-28465 (2004).Roberts, H.J., et al., Biol. Reprod. 68(5):1719-1726 (2003).Tsuchida, K., et al., Mol. Cell. Endocrinol. 220 (1-2), 59-65 (2004) (): ().Bondestam, J., et al., Cytogenet. Cell Genet. 95 (3-4), 157-162 (2001) (): ().