

ACVR1C Antibody (Center E271) Blocking Peptide
Synthetic peptide
Catalog # BP7102c

Specification

ACVR1C Antibody (Center E271) Blocking Peptide - Product Information

Primary Accession [Q8NER5](#)

ACVR1C Antibody (Center E271) 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](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=18123))

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7102c](/products/AP7102c) 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.

ACVR1C Antibody (Center E271) 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.

ACVR1C Antibody (Center E271) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ACVR1C Antibody (Center E271) Blocking Peptide - Images

ACVR1C Antibody (Center E271) Blocking Peptide - Background

ACVR1C, a serine/threonine protein kinase, is a type I receptor for the TGF β 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.

ACVR1C Antibody (Center E271) 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).