

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

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**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 $\beta$  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).