

**Activin A Receptor Type IC (ACVR1C) Antibody (N-term A48)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7102a****Specification**

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**Activin A Receptor Type IC (ACVR1C) Antibody (N-term A48) - Product Information**

Application	WB, IHC-P,E
Primary Accession	<a href="#">Q8NER5</a>
Other Accession	<a href="#">Q8K348</a>
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	33-62

**Activin A Receptor Type IC (ACVR1C) Antibody (N-term A48) - 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 ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=18123](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=18123))  
HGNC:18123

**Target/Specificity**

This Activin A Receptor Type IC (ACVR1C) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 33-62 amino acids from the N-terminal region of human Activin A Receptor Type IC (ACVR1C).

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Activin A Receptor Type IC (ACVR1C) Antibody (N-term A48) is for research use only and not for use in diagnostic or therapeutic procedures.

**Activin A Receptor Type IC (ACVR1C) Antibody (N-term A48) - 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**

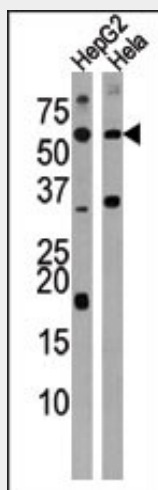
Present in pancreas, heart, colon, small intestine, ovary and the hippocampus, medulla oblongata and putamen of the brain Isoform 1, isoform 2, isoform 3 and isoform 4 are all expressed in the placenta throughout pregnancy.

**Activin A Receptor Type IC (ACVR1C) Antibody (N-term A48) - Protocols**

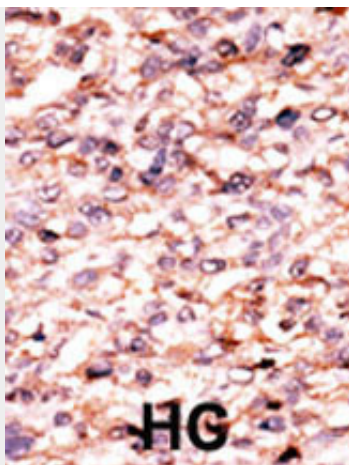
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Activin A Receptor Type IC (ACVR1C) Antibody (N-term A48) - Images**



Western blot analysis of anti-ACVR1C Antibody (N-term A48) (Cat.#AP7102a) in HepG2 and Hela cell line lysate (35ug/lane). ACVR1C (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

#### **Activin A Receptor Type IC (ACVR1C) Antibody (N-term A48) - 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 (N-term A48) - 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) (): ().

#### **Activin A Receptor Type IC (ACVR1C) Antibody (N-term A48) - Citations**

- [Overexpression of B2M and loss of ALK7 expression are associated with invasion, metastasis, and poor-prognosis of the pancreatic ductal adenocarcinoma.](#)