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

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7102a

Specification

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

Application	**WB, IHC-P,E**
Primary Accession	Q8NER5
Other Accession	Q8K348
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 (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

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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

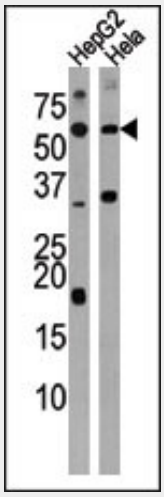
Tissue Location
Present in pancreas, heart, colon, small intestine, ovary and the hippocampus, medulla oblongata and putamen of the brain Isoform 1, isoform 2, isoform 3 and isoform 4 are all expressed in the placenta throughout pregnancy.

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

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

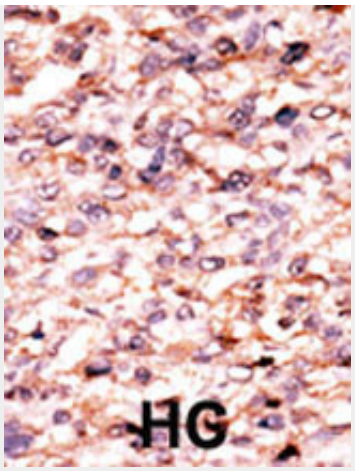
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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.

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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.