ACVR1C polyclonal antibody

Catalog # PAB2641 Size 400 uL

Applications



Western Blot (Cell lysate)

Western blot analysis of ACVR1C polyclonal antibody (Cat # PAB2641) in HepG2 and Hela cell line lysate (35 ug/lane). ACVR1C (arrow) was detected using the purified polyclonal antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Formalin-fixed and paraffin-embedded human hepatocellular carcinoma tissue reacted with ACVR1C polyclonal antibody (Cat # PAB2641), 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. HC = hepatocarcinoma.

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic peptide of ACVR1C.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to N-terminus of human ACVR1C.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Ammonium sulfate precipitation



Product Information

Recommend Usage	Western Blot (1:1000) Immunohistochemistry (1:50-100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

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Gene Info —	ACVR1C
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Entrez GenelD	<u>130399</u>
Protein Accession#	<u>NP_660302;Q8NER5</u>
Gene Name	ACVR1C
Gene Alias	ACVRLK7, ALK7
Gene Description	activin A receptor, type IC
Omim ID	<u>608981</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	ACVR1C is a type I receptor for the TGFB (see MIM 190180) family of signaling molecules. Upon ligand binding, type I receptors phosphorylate cytoplasmic SMAD transcription factors, which then translocate to the nucleus and interact directly with DNA or in complex with other transcription fact ors (Bondestam et al., 2001 [PubMed 12063393]).[supplied by OMIM
Other Designations	activin receptor-like kinase 7



Publication Reference

Nodal and ALK7 inhibit proliferation and induce apoptosis in human trophoblast cells.

Munir S, Xu G, Wu Y, Yang B, Lala PK, Peng C. The Journal of Biological Chemistry 2004 Jul; 279(30):31277.

• Activin receptor-like kinase-7 induces apoptosis through activation of MAPKs in a Smad3-dependent mechanism in hepatoma cells.

Kim BC, van Gelder H, Kim TA, Lee HJ, Baik KG, Chun HH, Lee DA, Choi KS, Kim SJ. The Journal of Biological Chemistry 2004 Jul; 279(27):28458.

 Identification of novel isoforms of activin receptor-like kinase 7 (ALK7) generated by alternative splicing and expression of ALK7 and its ligand, Nodal, in human placenta.

Roberts HJ, Hu S, Qiu Q, Leung PC, Caniggia I, Gruslin A, Tsang B, Peng C. Biology of Reproduction 2003 May; 68(5):1719.

Application: WB-Ti, Human, Placenta

Pathway

- Adherens junction
- Chronic myeloid leukemia
- <u>Colorectal cancer</u>
- <u>Cytokine-cytokine receptor interaction</u>
- Endocytosis
- <u>MAPK signaling pathway</u>
- Pancreatic cancer
- Pathways in cancer
- TGF-beta signaling pathway

Disease

Genetic Predisposition to Disease

😵 Abnova

Product Information

- Obesity
- Ovarian Failure
- Polycystic Ovary Syndrome
- Puberty
- Thrombophilia
- Tobacco Use Disorder