

ACVR2A Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7103A

Specification

ACVR2A Antibody (N-term) - Product Information

Application WB,E
Primary Accession P27037

Other Accession <u>P38444</u>, <u>P27038</u>, <u>Q90669</u>, <u>Q28043</u>, <u>Q28560</u>

Reactivity Human, Mouse

Predicted Bovine, Chicken, Rat, Sheep

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG

Antigen Region 2-29

ACVR2A Antibody (N-term) - Additional Information

Gene ID 92

Other Names

Activin receptor type-2A, Activin receptor type IIA, ACTR-IIA, ACTRIIA, ACVR2A, ACVR2

Target/Specificity

This ACVR2A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 2-29 amino acids from the N-terminal region of human ACVR2A.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

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

ACVR2A Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ACVR2A Antibody (N-term) - Protein Information

Name ACVR2A (HGNC:173)

Synonyms ACVR2





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Function On ligand binding, forms a receptor complex consisting of two type II and two type I transmembrane serine/threonine kinases. Type II receptors phosphorylate and activate type I receptors which autophosphorylate, then bind and activate SMAD transcriptional regulators. Receptor for activin A, activin B and inhibin A (PubMed: 17911401, PubMed: 10652306). Mediates induction of adipogenesis by GDF6 (By similarity).

Cellular Location

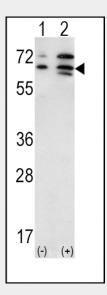
Cell membrane {ECO:0000250|UniProtKB:P27038}; Single-pass type I membrane protein

ACVR2A Antibody (N-term) - Protocols

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

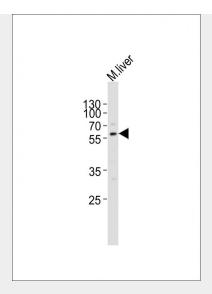
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ACVR2A Antibody (N-term) - Images

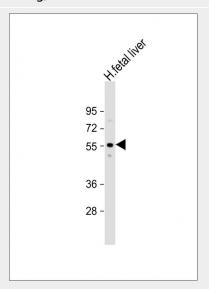


Western blot analysis of ACVR2A (arrow) using rabbit polyclonal ACVR2A Antibody (N-term) (Cat.#AP7103a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the ACVR2A gene (Lane 2) (Origene Technologies).





Anti-ACVR2A Antibody (N-term) at 1:2000 dilution + mouse liver lysates Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 57. 8 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Anti-ACVR2A Antibody (N-term) at 1:1000 dilution + human fetal liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 58 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

ACVR2A Antibody (N-term) - Background

ACVR2A is an activin A type II receptor. Activins are dimeric growth and differentiation factors which belong to the transforming growth factor-beta (TGF-beta) superfamily of structurally related signaling proteins. Activins signal through a heteromeric complex of receptor serine kinases which include at least two type I (I and IB) and two type II (II and IIB) receptors. These receptors are all transmembrane proteins, composed of a ligand-binding extracellular domain with cysteine-rich region, a transmembrane domain, and a cytoplasmic domain with predicted serine/threonine specificity. Type I receptors are essential for signaling; and type II receptors are required for binding ligands and for expression of type I receptors. Type I and II receptors form a stable complex after ligand binding, resulting in phosphorylation of type I receptors by type II receptors. Type II receptors are considered to be constitutively active kinases.

ACVR2A Antibody (N-term) - References





Jung, B., et al., Gastroenterology 126(3):654-659 (2004). Martins da Silva, S.J., et al., Dev. Biol. 266(2):334-345 (2004). Olaru, A., et al., Lab. Invest. 83(12):1867-1871 (2003). Casagrandi, D., et al., Mol. Hum. Reprod. 9(4):199-203 (2003). Greenwald, J., et al., Mol. Cell 11(3):605-617 (2003).