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ACVR2A Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7103A

Product Information

Application	WB, E
Primary Accession	P27037
Other Accession	P38444, P27038, Q90669, Q28043
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Rat, Chicken, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	57848
Antigen Region	2-29

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.

Protein Information

Name	ACVR2A (HGNC:173)
Synonyms	ACVR2
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

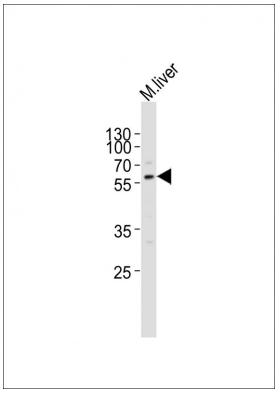
Background

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.

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).

Images



Anti-ACVR2A Antibody (N-term) at 1:2000 dilution + mouse liver lysates Lysates/proteins at 20 µg 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.