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ACVR2A Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP7103a

Specification

ACVR2A Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P27037

ACVR2A Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 92

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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7103a was selected from the N-term region of human ACVR2A. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ACVR2A Antibody (N-term) Blocking Peptide - 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). Mediates induction of adipogenesis by GDF6 (By similarity).

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

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ACVR2A Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

ACVR2A Antibody (N-term) Blocking Peptide - Images

ACVR2A Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - 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).