

**Activin Receptor Type IIB (ACVR2A/B) Antibody (Center) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP7104a****Specification**

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**Activin Receptor Type IIB (ACVR2A/B) Antibody (Center) Blocking peptide - Product Information**Primary Accession [P27037](#)**Activin Receptor Type IIB (ACVR2A/B) Antibody (Center) 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 [AP7104a](/product/products/AP7104a) was selected from the Center region of human ACVR2A/B. 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.

**Activin Receptor Type IIB (ACVR2A/B) Antibody (Center) 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:<http://www.uniprot.org/citations/17911401> target="\_blank">17911401</a>). Mediates induction of adipogenesis by GDF6 (By similarity).

**Cellular Location**

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

**Activin Receptor Type IIB (ACVR2A/B) Antibody (Center) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**Activin Receptor Type IIB (ACVR2A/B) Antibody (Center) Blocking peptide - Images****Activin Receptor Type IIB (ACVR2A/B) Antibody (Center) Blocking peptide - Background**

ACVR2A/B are activin A type II receptors. 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.

**Activin Receptor Type IIB (ACVR2A/B) Antibody (Center) 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).