

BMPR1A Antibody (Center C180)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2004D**Specification**

BMPR1A Antibody (Center C180) - Product Information

Application	IHC-P, WB,E
Primary Accession	P36894
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	166-195

BMPR1A Antibody (Center C180) - Additional Information**Gene ID** 657**Other Names**

Bone morphogenetic protein receptor type-1A, BMP type-1A receptor, BMPR-1A, Activin receptor-like kinase 3, ALK-3, Serine/threonine-protein kinase receptor R5, SKR5, CD292, BMPR1A, ACVRLK3, ALK3

Target/Specificity

This BMPR1A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 166-195 amino acids from the Central region of human BMPR1A.

Dilution

IHC-P~~1:50~100

WB~~1:2000

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

BMPR1A Antibody (Center C180) is for research use only and not for use in diagnostic or therapeutic procedures.

BMPR1A Antibody (Center C180) - Protein Information**Name** BMPR1A

Synonyms ACVRLK3, ALK3

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 BMP2, BMP4, GDF5 and GDF6. Positively regulates chondrocyte differentiation through GDF5 interaction. Mediates induction of adipogenesis by GDF6. May promote the expression of HAMP, potentially via its interaction with BMP2 (By similarity).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Cell surface
{ECO:0000250|UniProtKB:P36895}

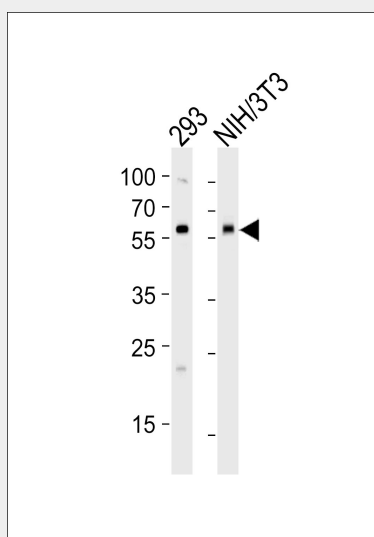
Tissue Location

Highly expressed in skeletal muscle.

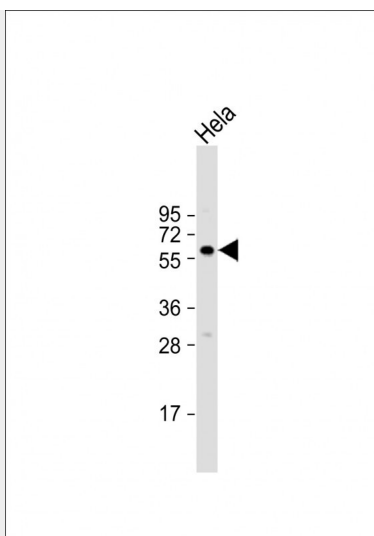
BMPR1A Antibody (Center C180) - Protocols

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

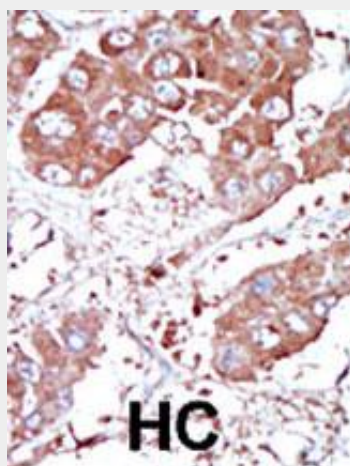
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

BMPR1A Antibody (Center C180) - Images

Western blot analysis of lysates from 293, mouse NIH/3T3 cell line (from left to right), using BMPR1A Antibody (C180) (Cat. #AP2004d). AP2004d was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



Anti-BMPR1A Antibody (C180) at 1:2000 dilution + HeLa whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 60 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

BMPR1A Antibody (Center C180) - Background

The bone morphogenetic protein (BMP) receptors are a family of transmembrane serine/threonine kinases that include the type I receptors BMPR1A and BMPR1B and the type II receptor BMPR2. These receptors are also closely related to the activin receptors, ACVR1 and ACVR2. The ligands of these receptors are members of the TGF-beta superfamily. TGF-betas and activins transduce their signals through the formation of heteromeric complexes with 2 different types of serine (threonine) kinase receptors: type I receptors of about 50-55 kD and type II receptors of about 70-80 kD. Type II receptors bind ligands in the absence of type I receptors, but they require their respective type I receptors for signaling, whereas type I receptors require their respective type II receptors for ligand binding.

BMPR1A Antibody (Center C180) - References

Zhou, X.-P., et al., Am. J. Hum. Genet. 69(4):704-711 (2001).
Howe, J.R., et al., Nat. Genet. 28(2):184-187 (2001).

ten Dijke, P., et al., Oncogene 8(10):2879-2887 (1993).

BMPR1A Antibody (Center C180) - Citations

- [The bone morphogenetic protein signaling pathway is upregulated in a mouse model of total parenteral nutrition.](#)