

Datasheet for ABIN7581831
anti-BMPR1A antibody (Extracellular)



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Overview

Quantity:	50 µL
Target:	BMPR1A
Binding Specificity:	AA 27-42, Extracellular
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This BMPR1A antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Flow Cytometry (FACS), Live Cell Imaging (LCI)

Product Details

Purpose:	A Rabbit Polyclonal antibody to BMPR1A (extracellular)
Immunogen:	(C)DSMLHGTGMKSDLQK, corresponding to amino acid residues 27 - 42 of mouse BMPR1A
Sequence:	(C)DSMLHGTGMK SLDLQK
Isotype:	IgG
Specificity:	Extracellular, N-terminus.
Predicted Reactivity:	Rat,Human - 15 out of 16 amino acid residues identical
Characteristics:	Anti-BMPR1A (extracellular) Antibody (ABIN7581831) is a highly specific antibody directed against an extracellular epitope of the mouse protein. The antibody can be used in western blot, immunohistochemistry and flow cytometry applications. It has been designed to recognize

Product Details

BMPR1A from mouse, rat and human samples.

Purification: Affinity purified on immobilized antigen.

Target Details

Target: BMPR1A

Alternative Name: BMPR1A ([BMPR1A Products](#))

Background: Bone Morphogenetic Protein Receptor Type-1A, Activin Receptor-Like Kinase 3, ALK3, Serine/Threonine-Protein Kinase Receptor R5, SKR5, CD292, Bone morphogenetic protein receptor type 1A (BMPR1A), also known as activin receptor-like kinase 3 (ALK3), and CD292, is a type I receptor within the Transforming Growth Factor-beta (TGF- β) receptor superfamily.¹ The TGF- β family of ligands has 33 human members, encoding TGF- β isoforms, bone morphogenetic proteins (BMPs), growth and differentiation factors (GDFs), activins, inhibins, nodal, and anti-Müllerian hormone (AMH). The TGF- β superfamily ligands regulate cellular function through seven type I TGF- β superfamily receptors (ALK (Activin like kinase)-1-7) and five type II TGF- β superfamily receptors (T β RII, ActRII, ActRIIB, AMHRII, and BMPRII). Type I (RI) and type II (RII) TGF- β superfamily receptors are serine/threonine kinases that form a complex together, and upon ligand binding the type II receptor phosphorylates the type I receptor to induce downstream signalling.¹ BMPR1A binds several of the TGF- β family ligands including BMP2, BMP4, GDF5, and GDF6, and is expressed in various tissues throughout the body, reflecting its diverse roles in development and homeostasis. BMPR1A has crucial roles in various biological processes, including embryonic development, organogenesis, and tissue homeostasis as well as roles in pathological conditions including heart disease, cancer and vascular calcification.¹⁻⁴ BMPR1A is expressed in the brain and spinal cord where it plays a role in neurogenesis, synaptic plasticity, axon guidance, and other processes related to neural development and function, as well as control of energy balance and appetite regulation.⁵ BMPR1A is present in the immune system where it is involved in the regulation of hematopoiesis and the differentiation of immune cells, as well as regulation of inflammation and immune evasion mechanisms in certain cancers.⁶

Gene ID: 12166

UniProt: [P36895](#)

Pathways: [Stem Cell Maintenance](#)

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: 1:300 Application Dilutions Western blot wb: 1:200
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Restrictions:	For Research Use only
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Handling

Format:	Lyophilized
Reconstitution:	0.2 mL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C

Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).
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