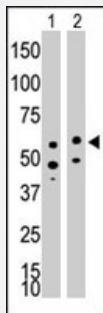


# BMPR1A polyclonal antibody

Catalog # PAB3834

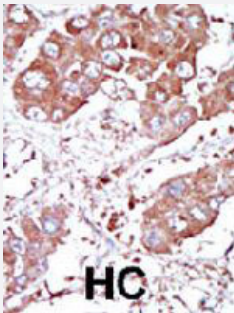
Size 200 uL

## Applications



### Western Blot (Cell lysate)

The BMPR1A polyclonal antibody (Cat # PAB3834) is used in Western blot to detect BMPR1A in Hela cell lysate (Lane 1) and 293 cell lysate (Lane 2) .



### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human hepatocellular carcinoma tissue reacted with BMPR1A polyclonal antibody (Cat # PAB3834) , 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.

## Specification

|                     |                                                                                             |
|---------------------|---------------------------------------------------------------------------------------------|
| Product Description | Rabbit polyclonal antibody raised against synthetic peptide of BMPR1A.                      |
| Immunogen           | A synthetic peptide (conjugated with KLH) corresponding to internal region of human BMPR1A. |
| Host                | Rabbit                                                                                      |
| Reactivity          | Human, Mouse                                                                                |
| Form                | Liquid                                                                                      |
| Purification        | Protein G purification                                                                      |

|                            |                                                                                                                                                                                |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Recommend Usage</b>     | Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (1:50-100)<br>Western Blot (1:1000)<br>The optimal working dilution should be determined by the end user. |
| <b>Storage Buffer</b>      | In PBS (0.09% sodium azide)                                                                                                                                                    |
| <b>Storage Instruction</b> | Store at 4°C. For long term storage store at -20°C.<br>Aliquot to avoid repeated freezing and thawing.                                                                         |
| <b>Note</b>                | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.                                                         |

## Applications

- Western Blot (Cell lysate)

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## Gene Info — BMPR1A

|               |                     |
|---------------|---------------------|
| Entrez GeneID | <a href="#">657</a> |
|---------------|---------------------|

|                    |                        |
|--------------------|------------------------|
| Protein Accession# | <a href="#">P36894</a> |
|--------------------|------------------------|

|           |        |
|-----------|--------|
| Gene Name | BMPR1A |
|-----------|--------|

|            |                                |
|------------|--------------------------------|
| Gene Alias | 10q23del, ACVRLK3, ALK3, CD292 |
|------------|--------------------------------|

|                  |                                              |
|------------------|----------------------------------------------|
| Gene Description | bone morphogenetic protein receptor, type IA |
|------------------|----------------------------------------------|

|         |                                                                                             |
|---------|---------------------------------------------------------------------------------------------|
| Omim ID | <a href="#">158350</a> <a href="#">174900</a> <a href="#">601299</a> <a href="#">610069</a> |
|---------|---------------------------------------------------------------------------------------------|

|               |                           |
|---------------|---------------------------|
| Gene Ontology | <a href="#">Hyperlink</a> |
|---------------|---------------------------|

## Gene Summary

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. [provided by RefSeq]

## Other Designations

OTTHUMP00000020014|activin A receptor, type II-like kinase 3

## Publication Reference

- [Germline mutations in BMPR1A/ALK3 cause a subset of cases of juvenile polyposis syndrome and of Cowden and Bannayan-Riley-Ruvalcaba syndromes.](#)

Zhou XP, Woodford-Richens K, Lehtonen R, Kurose K, Aldred M, Hampel H, Launonen V, Virta S, Pilarski R, Salovaara R, Bodmer WF, Conrad BA, Dunlop M, Hodgson SV, Iwama T, Jarvinen H, Kellokumpu I, Kim JC, Leggett B, Markie D, Mecklin JP, Neale K, Phillips R, Piris J, Rozen P, Houlston RS, Aaltonen LA, Tomlinson IP, Eng C.

American Journal of Human Genetics 2001 Aug; 69(4):704.

- [Germline mutations of the gene encoding bone morphogenetic protein receptor 1A in juvenile polyposis.](#)

Howe JR, Bair JL, Sayed MG, Anderson ME, Mitros FA, Petersen GM, Velculescu VE, Traverso G, Vogelstein B.

Nature Genetics 2001 Jun; 28(2):184.

- [Activin receptor-like kinases: a novel subclass of cell-surface receptors with predicted serine/threonine kinase activity.](#)

ten Dijke P, Ichijo H, Franzen P, Schulz P, Saras J, Toyoshima H, Heldin CH, Miyazono K.

Oncogene 1993 Aug; 8(10).

## Pathway

- [Cytokine-cytokine receptor interaction](#)
- [TGF-beta signaling pathway](#)

## Disease

- [Adenomatous Polyposis Coli](#)

- [Alzheimer Disease](#)
- [Anemia](#)
- [Bacteremia](#)
- [Chromosome Deletion](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Diabetes Mellitus](#)
- [Gastrointestinal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Insulin Resistance](#)
- [Intestinal Polyposis](#)
- [Intestinal Polyps](#)
- [Kidney Failure](#)
- [Liver Cirrhosis](#)
- [Neoplastic Syndromes](#)
- [Obesity](#)
- [Ovarian Failure](#)
- [Peutz-Jeghers Syndrome](#)
- [Polycystic Ovary Syndrome](#)
- [Polyps](#)
- [Precancerous Conditions](#)
- [Puberty](#)
- [Stomach Neoplasms](#)
- [Telangiectasia](#)

- [Thrombophilia](#)
- [Tobacco Use Disorder](#)