Datasheet for ABIN968806

# anti-BMPR2 antibody (AA 803-996)

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## Overview

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| Quantity: | 50 µg |
| Target: | BMPR2 |
| Binding Specificity: | AA 803-996 |
| Reactivity: | Human, Mouse, Rat |
| Host: | Mouse |
| Clonality: | Monoclonal |
| Conjugate: | This BMPR2 antibody is un-conjugated |
| Application: | Western Blotting (WB), Immunofluorescence (IF) |

## Product Details

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| Immunogen: | Mouse BMPR-II aa. 803-996 |
| Clone: | 18-BMPR |
| Isotype: | IgG1 |
| Cross-Reactivity: | Human, Rat (Rattus) |
| Characteristics: | 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.<br>2. Please refer to us for technical protocols.<br>3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.<br>4. Source of all serum proteins is from USDA inspected abattoirs located in the United States. |
| Purification: | The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity |

## Product Details

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| | chromatography. |

## Target Details

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| Target: | BMPR2 |
| Alternative Name: | BMPR-II (BMPR2 Products) |
| Background: | The transforming growth factor beta (TGFbeta)/activin/BMP family of growth factor plays a diverse and important role in growth, development, and differentiation. The receptors for this famiy of proteins are type I and II ser/thr kinase receptors. Bone morphogenetic protein receptors (BMPRs) include two type I receptors, BMPR-IA and BMPR-IB, and a type II receptor, BMPR-II. BMPR-II is a widely expressed receptor, with high mRNA expression during development in many tissues. BMPR-II transfected COS-1 cells show binding to BMP-7 (osteogenic protein-1) and BMP-4, and co-transfection with the type I receptor, ActR-I, leads to transcriptional activation in response to BMP-7. In addition, extracellular matrix proteins may regulate the expression of BMPR-II during angiogenesis, since fibrillar type I collagen induces BMPR-II expression in endothelial cells. In familial primary pulmonary hypertension, the BMPR-II gene is mutated in a manner that may disrupt ligand binding, kinase activity, and heteromeric dimer formation. Thus, BMPR-II may be an important mediator of BMP effects during growth and differentiation of endothelial cells. |
| Molecular Weight: | 130 kDa |
| Pathways: | Growth Factor Binding |

## Application Details

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| Comment: | Related Products: ABIN968540, ABIN967389 |
| Restrictions: | For Research Use only |

## Handling

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| Format: | Liquid |
| Concentration: | 250 µg/mL |
| Buffer: | Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide. |
| Preservative: | Sodium azide |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which |

## Handling

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| | should be handled by trained staff only. |
| Storage: | -20 °C |
| Storage Comment: | Store undiluted at -20°C. |

## Publications

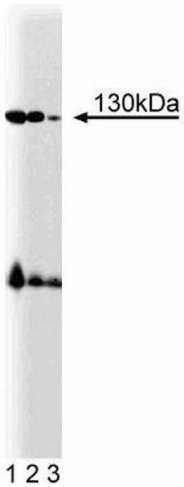
Product cited in:

Regazzoni, Winterhalter, Rohrer: "Type I collagen induces expression of bone morphogenetic protein receptor type II." in: **Biochemical and biophysical research communications**, Vol. 283, Issue 2, pp. 316-22, (2001) (PubMed).

, Lane, Machado, Pauciulo, Thomson, Phillips, Loyd, Nichols, Trembath: "Heterozygous germline mutations in BMPR2, encoding a TGF-beta receptor, cause familial primary pulmonary hypertension." in: **Nature genetics**, Vol. 26, Issue 1, pp. 81-4, (2000) (PubMed).

Rosenzweig, Imamura, Okadome, Cox, Yamashita, ten Dijke, Heldin, Miyazono: "Cloning and characterization of a human type II receptor for bone morphogenetic proteins." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 92, Issue 17, pp. 7632-6, (1995) (PubMed).

## Images




**Western Blotting**

**Image 1.** Western blot analysis of BMPR-II on mouse cerebrum lysate. Lane 1: 1:250, lane 2 :1:500, lane 3: 1:1000 dilution of anti-BMPR-II antibody