

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human BMPR-II in direct ELISAs and Western blots.                                                                                                                                                                                                                   |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant human BMPR-II<br>Ala26-Ile151<br>Accession # Q13873                                                                                                                                                                         |
| <b>Conjugate</b>          | Alexa Fluor 488<br>Excitation Wavelength: 488 nm<br>Emission Wavelength: 515-545 nm                                                                                                                                                                                         |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| <b>CyTOF-ready</b>          | Optimal dilution of this antibody should be experimentally determined. |
| <b>Flow Cytometry</b>       | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

Like other members of the TGF- $\beta$  superfamily, cellular responses to bone morphogenetic proteins (BMPs) have been shown to be mediated by the binding to heteromeric complex of type I and type II serine-threonine kinase receptors. Both receptor types are required for the signal transduction. BMP receptor II (BMPR-II) is one of the five mammalian type II receptors (including TGF- $\beta$ R-II, ActR-II, ActR-IIB, BMPR-II, and MISR-II) for the TGF- $\beta$  superfamily ligands. The type II receptors for TGF- $\beta$  and activin bind ligands with high affinity by itself. In contrast, BMPR-II binds BMP-2, BMP-4, and BMP-7 weakly in the absence of type I receptor, and the binding can be facilitated by the presence of the type I receptor. BMPR-II mRNA is widely expressed in fetal and adult tissues. Human and mouse BMPR-II are highly conserved sharing 97% sequence identity (1-3).

## PRODUCT SPECIFIC NOTICES

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