Human BMPR-IB/ALK-6 PE-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # 477914

Catalog Number: FAB5051P

100 TESTS

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human BMPR–IB/ALK–6 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant mouse BMPR-IB is observed.
Source	Monoclonal Mouse IgG_{2B} Clone # 477914
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human BMPR–IB/ALK–6 Lys14-Arg126 Accession # O00238
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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.

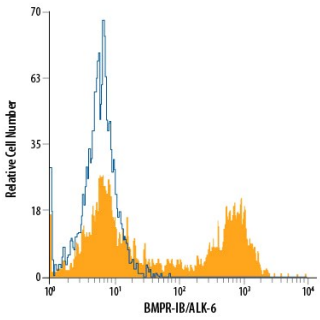
APPLICATIONS

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.*

	Recommended Concentration	Sample
Flow Cytometry	10 µL/10^6 cells	See Below

DATA

Flow Cytometry



Detection of BMPR-IB/ALK-6 in PC-3 Human Cell Line by Flow Cytometry. PC-3 human prostate cancer cell line was stained with Mouse Anti-Human BMPR-IB/ALK-6 PE-conjugated Monoclonal Antibody (Catalog # FAB5051P, filled histogram) or isotype control antibody (Catalog # IC0041P, open histogram). View our protocol for Staining Membrane-associated Proteins.

PREPARATION AND STORAGE

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

BACKGROUND

Cellular responses to bone morphogenetic proteins (BMPs) have been shown to be mediated by the formation of hetero-oligomeric complexes of the type I and type II serine/threonine kinase receptors. BMP receptor IB (BMPR-IB), also known as activin receptor-like kinase (ALK)-6, is one of seven known type I serine/threonine kinases that are required for the signal transduction of TGF-β family cytokines. In contrast to the TGF-β receptor system in which the type I receptor does not bind TGF-β in the absence of the type II receptor, type I receptors involved in BMP signaling (including BMPR-IA, BMPR-IB/ALK-6, and ActR-I/ALK-2) can independently bind the various BMP family proteins in the absence of type II receptors. Recombinant soluble BMPR-IB binds BMP-4 with high-affinity in solution and is a potent BMP-4 antagonist *in vitro*. BMPR-IB is expressed in various tissues during embryogenesis. In adult tissues, BMPR-IB is only found in the brain. The extracellular domain of BMPR-IB shares little amino acid sequence identity with the other mammalian ALK type I receptor kinases, but the cysteine residues are conserved. Human and mouse BMPR-IB are highly conserved and share 98% amino acid sequence identity.

References:

1. Kawabata, M. *et al.* (1998) Cytokine and Growth Factor Reviews **9:**49.
2. Ebendal, T. *et al.* (1998) J. Neuroscience Research **51:**139.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956