



20150204ML

Anti-Human ALK6 (BMP R1B) (#3E12)

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

Cat.-no.:	101-M176
Size:	100 µg
Lot. No.:	According to product label

Preparation: This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a mouse immunized with recombinant human ALK6 extra cellular domain. IgG2 fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

Target Background

Synonyms (Target):	BMPR1B; ALK6; ALK-6; CDw293
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Cellular responses to bone morphogenetic proteins (BMPs) have been shown to be mediated by the formation of heterooligomeric complexes of the type I and type II serine/threonine kinase receptors. BMP receptor IB (BMPRI_B), 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 TGFβ family cytokines. In contrast to the TGFβ receptor system in which the type I receptor does not bind TGFβ in the absence of the type II receptor, type I receptors involved in BMP signaling (including BMPRI_A, BMPRI_B/ ALK₆, and ActRI/ ALK₂) can independently bind the various BMP family proteins in the absence of type II receptors. Recombinant soluble BMPRI_B binds BMP₄ with high-affinity in solution and is a potent BMP₄ antagonist in vitro. BMPRI_B is expressed in various tissues during embryogenesis. In adult tissues, BMPRI_B is only found in the brain. The extracellular domain of BMPRI_B shares little amino acid sequence identity with the other mammalian ALK type I receptor kinases, but the cysteine residues are conserved. Human and mouse BMPRI_B are highly conserved and share 98% amino acid sequence identity.

Database References Target

Protein RefSeq:	NP_001194
Uniprot ID:	O00238
mRNA RefSeq:	NM_001203

Product Specifications

Host	Mouse
Reactivity against	Human
Clonality	Monoclonal Antibody
Clone	(#3E12)
Isotype	IgG2
Purification	Protein G chromatography
Antigen	recombinant human ALK6 extracellular domain
Formulation	lyophilized
Reconstitution buffer	PBS (sterile)

Reconstitution: Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

Stability: Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

Remarks: This antibody was selected for its ability to detect human ALK6. No cross reactivity was found to ALK3 (BMPRI-1A).

**AVOID REPEATED FREEZE AND THAW CYCLES!**

Applications

The antibody can be used within the following applications:

WB, IHC

Recommended usage:

Western Blot: 1:500 - 1:1000

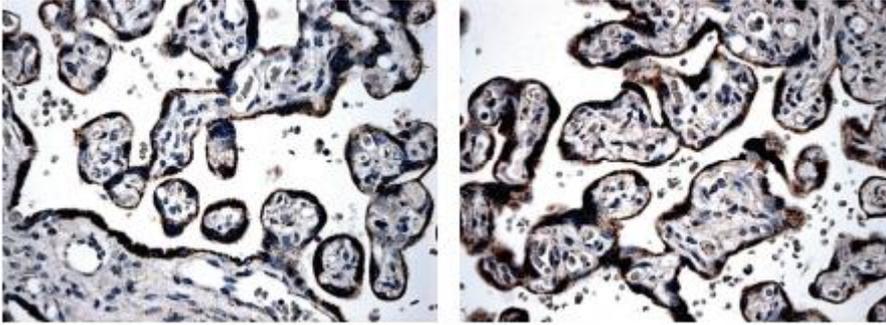
IHC: 1:50 - 1:200

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!



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Application/Handling



Human placenta (formalin fixed and paraffin embedded) section is subjected to IHC using 101-M176.