
anti-TGF β Receptor 1

Cat #: HM1368
Rabbit polyclonal IgG
0.2 $\mu\text{g}/\mu\text{l}$, store at 4 °C

For research use only

BACKGROUND

Three members of the TGF β family, TGF β 1, TGF β 2 and TGF β 3, have been identified in mammals. TGF β s mediate their activity by high affinity binding to the type II receptor 70 kDa transmembrane protein with a cytoplasmic serine-threonine kinase domain. For signaling growth inhibition and early gene responses the type II receptor requires both its kinase activity and association with members of type I receptors called activin receptor-like kinase (ALK) 1 to 6. Of these, only ALK5 has been shown to represent a functional TGF beta type 1 receptor. TGF β R2 phosphorylates TGFBR1 upon binding to its ligand, TGF-beta. TGF β R1 in turn phosphorylates the cytoplasmic effectors of the pathway, known as SMADs. Mutations in TGF β R1 gene have been associated with Loeys-Dietz aortic aneurysm syndrome (LDAS).

SPECIFICITY

This antibody reacts with both TGF β RI p55/ALK5 and ALK-2 of mouse, rat and human origin by Western blotting, immunoprecipitation and immunohistochemistry (including paraffinembedded sections).

IMMUNOGEN

A peptide at the carboxy terminus of the ALK-5 form of TGF β RI of human origin.

STORAGE

This antibody is stable for 12 months when stored at 2-8°C.

REFERENCE

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