

Product name:	IGF1R-Beta Mouse Monoclonal Antibody
Cat number:	MABN80596
Conjugate:	Unconjugated
Size:	100µL
Clone:	Monoclonal
Concentration:	1mg/ml
Host:	Mouse
Isotype:	Mouse IgG2b
Immunogen:	Purified recombinant fragment of IGF1R-Beta expressed in E. Coli.
Reactivity:	Human
Applications:	IHC 1:200-1:1000,ELISA 1:5000-1:20000
Molecular Weight:	96kDa
Purification:	Affinity Purification
Form:	Liquid
Buffer:	Ascitic fluid containing 0.03% sodium azide.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.
Background:	IGF1R (insulin-like growth factor 1 receptor), a transmembrane receptor tyrosine kinase, is widely expressed in many cell types within fetal and postnatal tissues, and in many cell lines. Upon binding to its ligands, IGF-I and IGF-II, receptor autophosphorylation occurs. The triple tyrosine cluster within the kinase domain (Tyr1131, Tyr1135 and Tyr1136) is the earliest major site of autophosphorylation. Phosphorylation of these three tyrosine residues is necessary for kinase activation. Insulin receptors (IRs) share significant similarity with IGF1 receptors in both structure and function, including an equivalent triple tyrosine cluster within the activation loop of the kinase domain (Tyr1146, Tyr1150 and Tyr1151). Tyrosine autophosphorylation of insulin receptor is one of the earliest cellular responses to insulin stimulation. Autophosphorylation begins with phosphorylation of Tyr1146 and either Tyr1150 or Tyr1151. Full kinase activation requires the triple tyrosine phosphorylation.