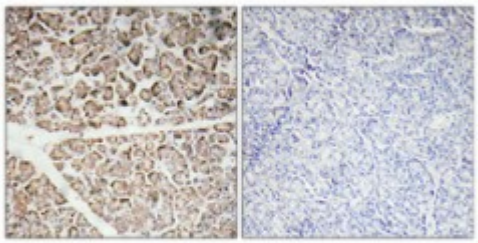
Anti-IGF-I antibody



Description	Rabbit polyclonal to IGF-I.

Model	STJ93653
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IHC
Immunogen	Synthesized peptide derived from human IGF-I.
Immunogen Region	Internal
Gene Symbol	IGF1
Dilution range	IHC 1:100-1:300ELISA 1:10000
Specificity	IGF-I Polyclonal Antibody detects endogenous levels of IGF-I protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Insulin-like growth factor I IGF-I Mechano growth factor MGF Somatomedin-C
Molecular Weight	17026/21841 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG

Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Alternative Names	Insulin-like growth factor I IGF-I Mechano growth factor MGF Somatomedin-C
Function	The insulin-like growth factors, isolated from plasma, are structurally and functionally related to insulin but have a much higher growth-promoting activity. May be a physiological regulator of [1-14C]-2-deoxy-D-glucose (2DG) transport and glycogen synthesis in osteoblasts. Stimulates glucose transport in bone-derived osteoblastic (PyMS) cells and is effective at much lower concentrations than insulin, not only regarding glycogen and DNA synthesis but also with regard to enhancing glucose uptake. May play a role in synapse maturation . Ca(2+)-dependent exocytosis of IGF1 is required for sensory perception of smell in the olfactory bulb . Acts as a ligand for IGF1R. Binds to the alpha subunit of IGF1R, leading to the activation of the intrinsic tyrosine kinase activity which autophosphorylates tyrosine residues in the beta subunit thus initiatiating a cascade of down-stream signaling events leading to activation of the PI3K-AKT/PKB and the Ras-MAPK pathways. Binds to integrins ITGAV:ITGB3 and ITGA6:ITGB4. Its binding to integrins and subsequent ternary complex formation with integrins and IGFR1 are essential for IGF1 signaling. Induces the phosphorylation and activation of IGFR1, MAPK3/ERK1, MAPK1/ERK2 and AKT1 .
Cellular Localization	Secreted