

AM50117PU-T

Monoclonal Antibody to Insulin-like growth factor I / IGF1 - Purified

Alternate names:	IBP1, IGF-I, MGF, Mechano growth factor, Somatomedin-C
Quantity:	20 µg
Concentration:	0.2 mg/ml
Background:	IGF-1 is a polypeptide growth factor with two isoforms that are produced by alternative splicing. Isoform 1 is also known as IGF-IB while isoform 2 is known as IGF-IA. IGF-1 stimulates the proliferation of a wide range of cell types including muscle, bone and cartilage tissue. It functions as an autocrine regulator of growth. Activation of IGF system has emerged as a key factor for tumor progression and resistance to apoptosis in many cancers like those of breast, thyroid and colon
Uniprot ID:	P05019
NCBI:	NP_000609.1
GeneID:	3479
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10P (for use in human samples), SM20P (for use in rat samples), AM03095PU-N
Clone:	SPM406
Immunogen:	Purified Human IGF-1 protein. Genename: IGF1
Format:	State: Liquid purified IgG fraction from Bioreactor Concentrate Purification: Protein A/G Chromatography Buffer System: 10mM PBS Preservatives: 0.05% Sodium Azide Stabilizers: 0.05% BSA
Applications:	ELISA: Use Antibody without BSA for Coating. Flow Cytometry: 0.5-1 µg/10 ⁶ cells. Immunofluorescence: 1-2 µg/ml. Western Blot: 0.5-1 µg/ml. Immunoprecipitation: 1-2 µg/500 µg protein lysate. Immunohistochemistry on Formalin-Fixed Paraffin Sections: 0.5-1 µg/ml for 30 minutes at RT. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes. In-vitro Neutralization of Biological Activity of IGF-1 (Use Azide Free Antibody). <u>Positive Control:</u> Pancreas or brain. Breast, Thyroid or Colon Cancers; IGF-1 recombinant protein. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Molecular Weight:	~7.6kDa
Specificity:	<p>This antibody is specific to Insulin-like Growth Factor (IGF-1) and shows minimal cross-reaction with IGF-11, Proinsulin, MSF, and Insulin.</p> <p>Cellular Localization: Cytoplasmic (Secreted).</p> <p>Species: Human, Mouse, Rat, Rabbit.</p> <p>Other species not tested.</p>
Storage:	<p>Store undiluted at 2-8°C.</p> <p>Shelf life: one year from despatch.</p>
General Readings:	<ol style="list-style-type: none"> 1. Rotwein P, Pollock KM, Didier DK, Krivi GG. Organization and sequence of the human insulin-like growth factor I gene. Alternative RNA processing produces two insulin-like growth factor I precursor peptides. J Biol Chem. 1986 Apr 15;261(11):4828-32. PubMed PMID: 2937782. 2. Sandberg-Nordqvist AC, Ståhlbom PA, Reinecke M, Collins VP, von Holst H, Sara V. Characterization of insulin-like growth factor 1 in human primary brain tumors. Cancer Res. 1993 Jun 1;53(11):2475-8. PubMed PMID: 8495408. 3. Zheng WH, et. al. (2000) J. Neural.Transm. Suppl. 2000: 261-272.