



Anti-Human IGF-1

20150223ML



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	102-P28
Size:	100 µg
Lot. No.:	According to product label

Preparation: Produced from sera of rabbits pre-immunized with highly pure (>98%) recombinant human IGF 1 (Insulin-like Growth Factor-1). Anti-human IGF 1 specific antibody was purified by affinity chromatography employing immobilized human IGF 1 matrix.

Target Background

Synonyms (Target):	IGF1; IGF1; IGF-I; IGF1A
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Insulin-like growth factor (IGF)-I (also known as somatomedin C and somatomedin A) and IGF-II (multiplication stimulating activity or MSA) belong to the family of insulin-like growth factors that are structurally homologous to proinsulin. Mature IGF-I and IGF-II share approximately 70% sequence identity. Both IGF-I and IGF-II are expressed in many tissues and cell types and may have autocrine, paracrine and endocrine functions. Mature IGF-I and IGF-II are highly conserved between the human, bovine and porcine proteins (100% identity), and exhibit cross-species activity.

Database References Target

Protein RefSeq:	NP_000609.1
Uniprot ID:	P05019
mRNA RefSeq:	NM_000618.3

Product Specifications

Species reactivity	Human
Clone/Ab feature	Rabbit IgG
Cross reactivity	Human
Host	Rabbit
Clonality	Polyclonal Antibody
Purification	Antigen-affinity purified
Immunogen	Recombinant human IGF-1
Formulation	lyophilized from PBS
Reconstitution buffer	water

Reconstitution: Reconstitute the antibody in sterile water to a concentration of 0.1 - 1.0 mg/ml.

Stability: The lyophilized antibody is stable for at least 2 years from date of receipt at -20°C. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.



AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

Neutralization: To yield one-half maximal inhibition [ND₅₀] of the biological activity of human IGF-1 (5.0 ng/ml), a concentration of 0.67- 1.0 µg/ml of this antibody is required.

Western Blot: To detect human IGF-1 by Western Blot analysis this antibody can be used at a concentration of 0.1 - 0.2 mg/ml. Used in conjunction with compatible secondary reagents the detection limit for recombinant human IGF-1 is 1.5 - 3.0 ng/lane, under either reducing or non-reducing conditions.

Sandwich ELISA: To detect human IGF-1 by sandwich ELISA (using 100 µl/well antibody solution) a concentration of 0.5- 2.0 mg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with appropriate secondary reagents, allows the detection of at least 0.2 - 0.4 ng/well of recombinant human IGF-1.

Immunohistochemistry: A staining of human breast invasive ductal carcinoma sections was obtained with this antibody (parameter: formalin-fixed, paraffin-embedded, recommended concentration: 0.25 µg/ml, incubation overnight, 4°C; Detection: HRP-labeled polymere detection system in combination with DAB chromogen). Optimal results were achieved without additional treatment for antigen retrieval.

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