

IGF-1 elisa kit

Bovine IGF-1 PicoKine ELISA Kit

CATALOG # AAA124774	REACTIVITY Bovine There is no detectable cross-reactivity with IGF-2.	APPLICATIONS ELISA
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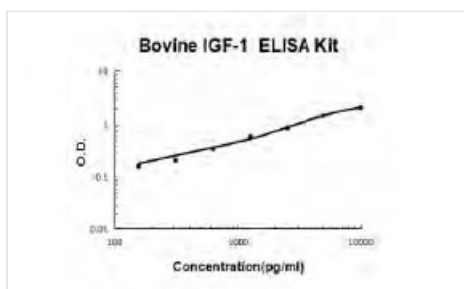
PRODUCT SYNONYMS

IGF-1; Bovine IGF-1 PicoKine ELISA Kit; Insulin-like growth factor I; IGF-I; Mechano growth factor; MGF; Somatomedin-C; IGF1; IBP1; IGF-1 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Bovine There is no detectable cross-reactivity with IGF-2.
Specificity	Natural and recombinant Bovine IGF1
Sequence Length	158
Samples	Cell culture supernates, serum and plasma(heparin, edta)
Detection Range	156pg/ml-10000pg/ml
Sensitivity	<50pg/ml
Applicable Applications for IGF-1 elisa kit	ELISA
Intra-assay Precision	Intra-Assay Precision (Precision within an assay): Three samples of known concentration were tested on one plate to assess intra-assay precision.
Inter-assay Precision	Inter-Assay Precision (Precision across assays):Three samples of known concentration were tested in separate assays to assess interassay precision.
Preparation and Storage	Store at 4 degree C for 6 months, at -20 degree C for 12 months. Avoid multiple freeze-thaw cycles.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for IGF-1 elisa kit	Principle of the Assay: The Picokine™ Bovine IGF1 Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid phase immunoassay specially designed to measure Bovine IGF1 with a 96-well strip plate that is pre-coated with antibody specific for IGF1. The detection antibody is a biotinylated antibody specific for IGF1. The capture antibody is monoclonal antibody from mouse, the detection antibody is polyclonal antibody from goat. The kit contains recombinant Bovine IGF1 with immunogen: Expression system for standard: E.coli; Immunogen sequence: G49-A118. The kit is analytically validated with ready to use reagents. To measure Bovine IGF1, add standards and samples to the wells, then add the biotinylated detection antibody. Wash the wells with PBS or TBS buffer, and add Avidin-Biotin-Peroxidase Complex (ABC-HRP). Wash away the unbounded ABC-HRP with PBS or TBS buffer and add TMB. TMB is substrate to HRP and will be catalyzed to produce a blue color product, which changes into yellow after adding acidic stop solution. The density of the yellow product is linearly proportional to Bovine IGF1 in the sample. Read the density of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Bovine IGF1 in the sample. Background/Introduction: Insulin-like growth factor 1(IGF-1) that was once called somatomedin C, is a polypeptide protein hormone similar in molecular structure to insulin. It plays an important role in childhood growth and continues to have anabolic effects in adults. Bovine IGF1 is a single chain 70-amino acid polypeptide cross-linked by 3 disulfide bridges, with a calculated molecular mass of 7.6 kD.1 The IGF1 gene, mapped on 12q22-q24. contains 5 exons. Exons 1-4 encode the 195-amino acid precursor(IGF1B), and exons 1, 2, 3, and 5 encode the 153-residue peptide(IGF1A). The structure of IGF1 resembles that of IGF2. And the IGF1 and IGF2 genes have complex structures with multiple promoters. The expression of both genes is regulated at the levels of transcription, RNA processing, and translation. IGF-1 is produced primarily by the liver as an endocrine hormone as well as in target tissues in a paracrine/autocrine fashion. Moreover, approximately 98% of IGF-1 is always bound to one of 6 binding proteins(IGF-BP). Furthermore, IGF-1 is one of the most potent natural activators of the AKT signaling pathway, a stimulator of cell growth and multiplication and a potent inhibitor of programmed cell death.
Product Categories/Family for IGF-1 elisa kit	Signal Transduction; Growth Factors/Hormones; insulin/insulin-like; Cancer; Growth Factors; insulin and insulin-like; Developmental Biology; post embryonic development; aging

NCBI AND UNIPROT INFORMATION

NCBI GI #	11024682
NCBI GeneID	3479
NCBI Accession #	NP_000609.1
NCBI GenBank Nucleotide #	NM_000618.4
UniProt Accession #	P05019; P01343; Q14620; B2RWM7; E9PD02
Molecular Weight	21841 MW
NCBI Official Full Name	insulin-like growth factor I isoform 4 preproprotein
NCBI Official Synonym Full Names	insulin like growth factor 1
NCBI Official Symbol	IGF1
NCBI Official Synonym Symbols	MGF; IGFI; IGF-I
NCBI Protein Information	insulin-like growth factor I
UniProt Protein Name	Insulin-like growth factor I
UniProt Gene Name	IGF1
UniProt Synonym Gene Names	IBP1; IGF-I; MGF

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.