Datasheet for ABIN5510546

# IGF1 ELISA Kit

1 Image

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## Overview

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| Quantity: | 96 tests |
| Target: | IGF1 |
| Binding Specificity: | AA 49-118 |
| Reactivity: | Horse |
| Method Type: | Sandwich ELISA |
| Application: | ELISA |

## Product Details

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| Purpose: | Sandwich High Sensitivity ELISA kit for Quantitative Detection of horse equine IGF-1 |
| Brand: | PicoKine™ |
| Analytical Method: | Quantitative |
| Detection Method: | Colorimetric |
| Specificity: | Expression system for standard: E.coli<br>Immunogen sequence: G49-A118 |
| Cross-Reactivity (Details): | There is no detectable cross-reactivity with IGF-2. |
| Characteristics: | Sequence similarities: Belongs to the insulin family. |

## Target Details

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| Target: | IGF1 |
| Alternative Name: | IGF1 (IGF1 Products) |

## Target Details

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| Background: | Protein 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 rat 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. .<br>Background: 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. horse equine 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.<br>Synonyms: Insulin-like growth factor I,IGF-I,Mechano growth factor,MGF,Somatomedin-C,IGF1,IBP1,<br>Full Gene Name: Insulin-like growth factor I<br>Cellular Localisation: Secreted. |
| UniProt: | P05019 |
| Pathways: | RTK Signaling, Intracellular Steroid Hormone Receptor Signaling Pathway, Peptide Hormone Metabolism, Hormone Activity, Regulation of Intracellular Steroid Hormone Receptor Signaling, Regulation of Hormone Metabolic Process, Regulation of Hormone Biosynthetic Process, Stem Cell Maintenance, Glycosaminoglycan Metabolic Process, Regulation of Carbohydrate Metabolic Process, Autophagy, Smooth Muscle Cell Migration, Activated T Cell Proliferation, Positive Regulation of fat Cell Differentiation |

## Application Details

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| Plate: | Pre-coated |

## Application Details

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| Restrictions: | For Research Use only |

## Handling

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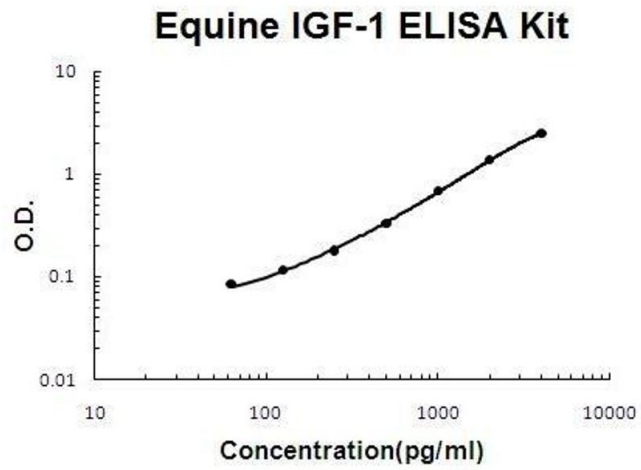
| Storage: | 4 °C,-20 °C |
| Storage Comment: | Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles(Shipped with wet ice.) |
| Expiry Date: | 12 months |

## Images




**ELISA**

**Image 1.** Horse equine IGF-1 PicoKine ELISA Kit standard curve