Datasheet for ABIN7281378

Insulin Protein (INS) (AA 25-110) (His tag)

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Overview

Quantity:	100 µg
Target:	Insulin (INS)
Protein Characteristics:	AA 25-110
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Insulin protein is labelled with His tag.
Application:	SDS-PAGE (SDS)

Product Details

Sequence:	MGSSHHHHHH SSGLVPRGSH MGSFVNQHLC GSHLVEALYL VCGERGFFYT PKTRREAEDL QVGQVELGGG PGAGSLQPLA LEGSLQKRGI VEQCCTSICS LYQLENYCN
Purity:	> 95 % by SDS - PAGE
Endotoxin Level:	< 1.0 EU per 1ug of protein (determined by LAL method)
Biological Activity Comment:	Measured in a cell proliferation assay using MCF7 human breast cancer cell. The ED50 for this effect is less or equal to 4 ug/ml.

Target Details

Target:	Insulin (INS)

Target Details

Alternative Name:	INS (INS Products)
Background:	INS, also known as insulin preproprotein, is a biologically inactive precursor to the biologically active endocrine hormone insulin. Insulin is an essential hormone for maintaining metabolic homeostasis in the body. To make fully bioactive insulin, pancreatic beta cells initiate synthesis of INS. It is converted into proinsulin by signal peptidases, which remove its signal peptide from its N-terminus. Finally, proinsulin is converted into the bioactive hormone insulin by removal of the C-peptide. Recombinant human INS, fused to His-tag at N-terminus, was expressed in E.coli and purified by conventional chromatography techniques.
Molecular Weight:	11.8 kDa (109 aa), confirmed by MALDI-TOF
NCBI Accession:	NP_000198
UniProt:	P01308
Pathways:	NF-kappaB Signaling, RTK Signaling, Positive Regulation of Peptide Hormone Secretion, Peptide Hormone Metabolism, Hormone Activity, Carbohydrate Homeostasis, ER-Nucleus Signaling, Regulation of Carbohydrate Metabolic Process, Feeding Behaviour, Autophagy, Negative Regulation of intrinsic apoptotic Signaling, Brown Fat Cell Differentiation, Positive Regulation of fat Cell Differentiation

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Comment:	Bioactivity Validated
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.5 mg/mL
Buffer:	Liquid. In Phosphate-Buffered Saline (pH 7.4) containing 10 % Glycerol
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Can be stored at +4C short term (1-2 weeks). For long term storage, aliquot and store at -20C or -70C. Avoid repeated freezing and thawing cycles.