Datasheet for ABIN5954928

Prolactin Protein (PRL) (AA 29-227) (Fc Tag,AVI tag,Biotin)

Go to Product page

2 Images

Overview

Quantity:	200 µg
Target:	Prolactin (PRL)
Protein Characteristics:	AA 29-227
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Prolactin protein is labelled with Fc Tag,AVI tag,Biotin.

Product Details

Sequence:	AA 29-227
Specificity:	Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.
Purity:	>95 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	Prolactin (PRL)
Alternative Name:	Prolactin (PRL Products)
Background:	Prolactin (gene name PRL) is a secreted neuroendocrine pituitary hormone that acts primarily on the mammary gland to promote lactation, but has pleiotropic effects in both males and females. Prolactin is synthesized as a prohormone. Following cleavage of the signal peptide,

Target Details

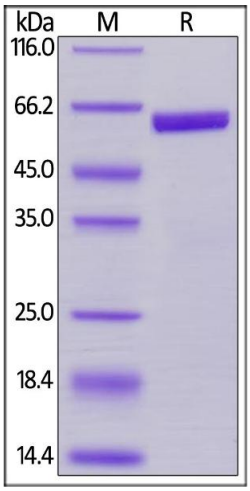
	the length of the mature hormone is between 194 and 199 amino acids, depending on species. Hormone structure is stabilized by three intramolecular disulfide bonds. Excessive secretion of prolactin - hyperprolactinemia - is a relative common disorder in humans. This condition has numerous causes, including prolactin-secreting tumors and therapy with certain drugs. The prolactin receptor (gene name PRLR) is a transmembrane type I glycoprotein that belongs to the cytokine hematopoietic receptor family. Expression of the prolactin receptor is widespread. Each prolactin molecule is thought to bind two receptor molecules
Molecular Weight:	51.2 kDa
NCBI Accession:	NP_000939
Pathways:	JAK-STAT Signaling, Peptide Hormone Metabolism, Response to Growth Hormone Stimulus, Protein targeting to Nucleus

Application Details

Comment:	Ready-to-use AvitagTM biotinylated protein: The product is exclusively produced using the AvitagTM technology. Briefly, a unique 15 amino acid peptide, the Avi tag, is introduced into the recombinant protein during expression vector construction. The single lysine residue in the Avi tag is enzymatically biotinylated by the E. Coli biotin ligase BirA. This single-point enzymatic labeling technique brings many advantages for commonly used binding assays. The biotinylation happens on the lysine residue of Avi tag, and therefore does NOT interfere with the target protein's natural binding activities. In addition, when immobilized on an avidin-coated surface, the protein orientation is uniform because the position of the Avi tag in the protein is precisely controlled.
Restrictions:	For Research Use only

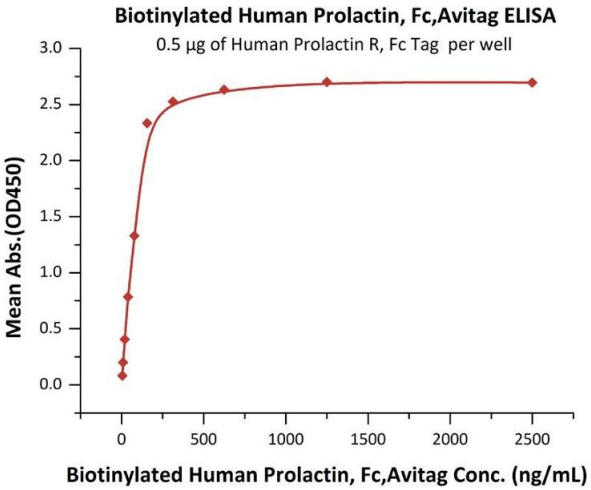
Handling

Format:	Lyophilized
Buffer:	Tris with Glycine, Arginine and NaCl, pH 7.5
Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	-20 °C



SDS-PAGE

Image 1. Biotinylated Human Prolactin, Fc,Avitag on under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95 % .



ELISA

Image 2. Immobilized Human Prolactin R, Fc Tag (ABIN5674642,ABIN6253668) at 5 µg/mL (100 µL/well) can bind Biotinylated Human Prolactin, Fc,Avitag (ABIN5954928,ABIN6253576) with a linear range of 5-156 ng/mL (QC tested).