

Datasheet for 009-001-V23-0050**rHuman IGF-II Protein****Overview**

Description:	Human Insulin-like Growth Factor II Recombinant Protein - 009-001-V23-0050
Item No.:	009-001-V23-0050
Size:	50 µg
Applications:	SDS-PAGE, Cellular Assay
Origin:	Human
Expressed in:	E. coli

Product Details

Background:	Insulin-like Growth Factor II, IGF-II, is a major growth hormone made by Theca cells during gestation. While IGF-II is known to engage the IGF-I receptor (IGF1R) to mediate embryonic growth, IGF-II is also known to bind the IGF-II receptor (IGF2R). IGF2R is thought to be signaling dead receptor that acts as a sink by binding up free IGF-II. Recombinant human IGF-II is non-glycosylated protein, containing 67 amino acids, with a molecular weight of 7.5 kDa.
Synonyms:	Somatamedin A
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	IGF2
Purity/Specificity:	Insulin-like Growth Factor II purity was determined to be greater than 97% as determined by HPLC, analysis by UV-Spectroscopy at 280nm, and by reducing and non-reducing SDS-PAGE.
Relevant Links:	• UniProtKB - P01344

Application Details

Tested Applications:	SDS-PAGE
Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Insulin-like Growth Factor II Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Insulin-like Growth Factor II in immunological assays.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/ μ g protein. Biologic Activity: The activity is determined by the dose dependent proliferation of FDC-P1 cells and is typically 1.5-6 ng/mL.

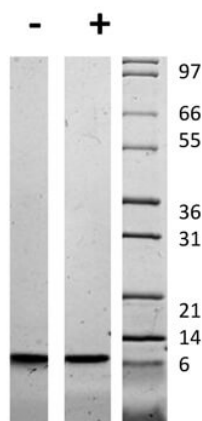
Formulation

Physical State:	Lyophilized
Buffer:	0.1% Trifluoroacetic acid
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	50 μ L
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

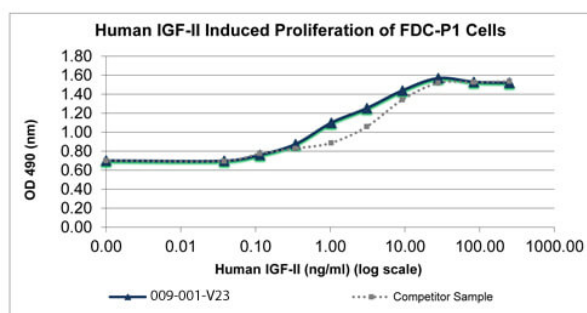
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



SDS-PAGE

SDS-PAGE of Human Insulin-like Growth Factor II Recombinant Protein. Lane 1: 1 µg Human IGF-II in non-reducing conditions (-). Lane 2: 1 µg Human IGF-II in reducing conditions (+). Lane 3: Molecular weight marker. Human IGF-II has a predicted MW of 7.5 kDa.



SDS-PAGE

Bioactivity of Human Insulin-like Growth Factor II Recombinant Protein. FDC-P1 cells were cultured with 0 to 250 ng/mL Human IGF-II. Cell proliferation was measured after 48 hours and the linear portion of the curve was used to calculate the ED50. The ED50 of Human IGF-II is 1.1-1.6 ng/mL. This value is comparable to the competitor sample and to the expected range of 1.5-6 ng/mL.

Disclaimer

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