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IGF1 Rabbit

Insulin-Like Growth Factor 1 Rabbit Recombinant
GRF0171

Product Overview

Name	IGF1 Rabbit
Description	
Insulin-Like Growth Factor 1 Rabbit Recombinant	
Accession (Primary)	Q95222
Synonyms	
Somatomedin C, IGF-I, IGFI, IGF1, IGF-IA, Mechano growth factor, MGF.	
Introduction	
The IGFs comprise a family of peptides that play important roles in mammalian growth and development. IGF1 mediates many of the growth-promoting effects of growth hormone. Early studies showed that growth hormone did not directly stimulate the incorporation of sulfate into cartilage, but rather acted through a serum factor, termed 'sulfation factor,' which later became known as 'somatomedin'. Three main somatomedins have been characterized: somatomedin C (IGF1), somatomedin A, and somatomedin B. IGF-1 is a small protein secreted mostly but not exclusively by the liver and circulating in blood mostly as a complex with several IGF binding proteins. It has growth-regulating, insulin-like, and mitogenic functions and it is secreted in response to growth hormone stimulation.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
The protein was lyophilized from a concentrated (0.5mg/ml) solution with 0.02% NaHCO3.	
Stability	
Lyophilized Insulin-Like Growth Factor-1 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IGF1 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.	
Purity	
Greater than 98.0% as determined by: (a) Gel-filtration chromatography under non denaturing conditions. (b) Analysis	

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by SDS-PAGE.

Amino acid sequence

MTAGPETLCG AELVDALQFV CGDRGFYFNK PTGYGSSSRR APQTGIVDEC CFRSCDLRRL EMYCAPLKP

Biological Activity

IGF-I is biologically active when compared to human IGF-1. The ED50, calculated by the dose -dependent proliferation of human MCF/7 cells is 5 to 25ng/ml in the cell culture mixture dependent on culture conditions. Its activity consists of 30-40 % compared to human IGF-1.

Solubility

It is recommended to reconstitute the lyophilized rbIGF-I in sterile 0.4% NaHCO3 adjusted to ph 8-9, not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

IGF1 Rabbit is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (Q95222)