

Cytokines

Mouse Recombinant IGF-II



Scientists Helping Scientists™ | WWW.STEMCELL.COM

TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM

FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

Insulin-like growth factor 2

Catalog #	78221	10 µg
	78221.1	100 µg
	78221.2	500 µg
	78221.3	1000 µg

Product Description

Insulin-like growth factor 2 (IGF-II) is a polypeptide that belongs to the family of insulin-like growth factors that are similar in molecular structure to proinsulin. IGF-II binding to IGF-I receptor activates a signaling cascade via the MAPK and PI3K pathways. IGF-II affects growth, differentiation, and survival of cells in a variety of tissues during embryonic development. It stimulates proliferation and migration of primary lymphatic endothelial cells, and induces lymphangiogenesis (Guvakova).

Product Information

Alternative Names:	Insulin-like growth factor type 2, Insulin-like growth factor II, Somatomedin A, T3M-11-derived growth factor
Accession Number:	P09535
Amino Acid Sequence:	AYGPGETLCG GELVDTLQFV CSDRGFYFSR PSSRANRRSR GIVEECCFRS CDLALLETYC ATPAKSE
Predicted Molecular Mass:	7.4 kDa
Species:	Mouse
Cross Reactivity:	Not determined
Formulation:	Lyophilized from a sterile-filtered solution containing 0.1% trifluoroacetic acid.
Source:	E. coli

Specifications

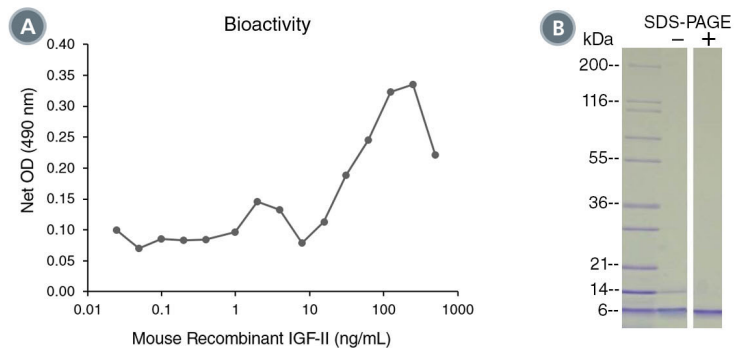
Activity:	The specific activity is $\geq 2.0 \times 10^4$ units/mg ($EC_{50} \leq 50$ ng/mL) as determined by a cell proliferation assay using FDC-P1 cells.
Purity:	$\geq 95\%$
Endotoxin Level:	Measured by kinetic Limulus amoebocyte lysate (LAL) analysis and is ≤ 1 EU/µg protein.

Preparation and Storage

Storage:	Store at -20°C to -80°C.
Stability:	Stable as supplied for 12 months from date of receipt.
Preparation:	Centrifuge vial before opening. Reconstitute the product in sterile water to at least 0.1 mg/mL by pipetting the solution down the sides of the vial. Do not vortex.

OPTIONAL: After reconstitution, if product will not be used immediately, dilute with concentrated bovine serum albumin (BSA) to a final BSA concentration of 0.1%. The effect of storage of stock solution on product performance should be tested for each application. As a general guide, do not store at 2 - 8°C for more than 1 month or at -20°C to -80°C for more than 3 months. Avoid repeated freeze-thaw cycles.

Data



(A) The biological activity of Mouse Recombinant IGF-II was tested by its ability to promote the proliferation of FDC-P1 cells. Cell proliferation was measured using a fluorometric assay method. The EC50 is defined as the effective concentration of the growth factor at which cell proliferation is at 50% of maximum. The EC50 in the above example is 32 ng/mL.

(B) 1 μ g of Mouse Recombinant IGF-II was resolved with SDS-PAGE under reducing (+) and non-reducing (-) conditions and visualized by Coomassie Blue staining. Mouse Recombinant IGF-II has a predicted molecular mass of 7.4 kDa.

Related Products

For a complete list of cytokines, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/cytokines or contact us at techsupport@stemcell.com.

References

Guvakova MA. (2007) Insulin-like growth factors control cell migration in health and disease. *Int J Biochem Cell Biol* 39(5): 890–909.

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485. PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2019 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, and Scientists Helping Scientists are trademarks of STEMCELL Technologies Canada Inc. All other trademarks are the property of their respective holders. While STEMCELL has made all reasonable efforts to ensure that the information provided by STEMCELL and its suppliers is correct, it makes no warranties or representations as to the accuracy or completeness of such information.