

Product Information

Monoclonal Anti-Insulin-like Growth Factor-II Clone 75014

produced in mouse, purified immunoglobulin

Catalog Number **I9659**

Product Description

Monoclonal Anti-Insulin-like Growth Factor-II (IGF2) (mouse IgG2A isotype) is purified from a hybridoma produced by the fusion of mouse myeloma cells and B cells from a mouse immunized with recombinant human Insulin-like Growth Factor-II (GenelD 3481) expressed and purified from *Escherichia coli*. The antibody is purified by Protein G affinity chromatography.

Monoclonal Anti-Insulin-like Growth Factor-II recognizes human Insulin-like Growth Factor-II. Applications include immunoblotting. In immunoblotting, this antibody shows approximately 10-50% cross-reactivity with rmlGF-II.

Insulin-like growth factor-II (also known as multiplication stimulating activity or MSA) and insulin-like growth factor I (IGF-I) belong to the family of insulin-like growth factors, which are structurally homologous to proinsulin. Mature IGF-I and IGF-II are highly conserved and share ~70% amino acid sequence identity. Mouse Igf2, a 67 amino acid protein, has a predicted molecular mass of ~7.4 kDa. Mouse and human IGF-II share 91% sequence identity.

Insulin-like growth factor-II has autocrine, paracrine, and endocrine functions. It is a potent mitogenic growth factor that mediates growth-promoting activities in embryonic development. IGF-II binds the IGF-II receptor with high affinity.

IGF-I and IGF-II are expressed in many tissues and cell types. IGF-II is mitogenic for a variety of cultured cells including human or chicken fibroblasts, mouse 3T3 cells, normal rat kidney cells, and MCF-7 human breast carcinoma cells.¹

Reagent

Supplied lyophilized from a 0.2 µm filtered solution of phosphate buffered saline with 5% trehalose.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

To one vial of lyophilized powder, add 1 mL of 0.2 µm filtered PBS to produce a 0.5 mg/mL stock solution. If aseptic technique is used, no further filtration should be necessary for use in cell culture environments.

Storage/Stability

Prior to reconstitution, store at -20 °C. Reconstituted product may be stored at 2-8 °C for up to one month. For extended storage, freeze in working aliquots at -20 °C. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended.

Product Profile

Immunoblotting: a working concentration of 1-2 µg/mL is recommended to detect human IGF2. Using a colorimetric detection system, the detection limit for recombinant human IGF2 is ~25 ng/lane and 1 ng/lane under non-reducing and reducing conditions, respectively.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration. Endotoxin: <0.1 EU/µg antibody as determined by the LAL method.

References

1. Zumstein, P., et al., J. Biol. Chem., **262**, 11252 (1987).

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