
Product Data Sheet

Product Name: MIA Human
Cat. No.: GP20750
Batch No.: 1

Product Data

Purity >98% Source Escherichia Coli.
Physical Appearance solid Shipping Condition Shipped at Room temp.

Synonyms Melanoma-derived growth regulatory protein precursor; Cartilage-derived retinoic acid-sensitive protein; CD-RAP; MIA.

Amino Acid Sequence Agrees with the sequence of native MIA human with an addition N-terminal Methionine

residue.MGPMPKLADRKLCADQECSSHPISMAVALQDYMAPDCRFLTIHRGQVYVYVFLKGRGRFLWGGSVQGDYDGDLAARLGYFPSSIVREDQTLK

Solubility It is recommended to reconstitute the lyophilized Melanoma Inhibitory Activity in sterile 18MΩ-cm H₂O not less than 100μg/ml, which further diluted to other aqueous solutions.

Formulation The protein was lyophilized from a concentrated (1mg/ml) solution containing 20mM Potassium-phosphate pH=7 and 150mM potassium chloride.

Introduction

The Melanoma Inhibitory protein (MIA) was identified as an inhibitor of in vitro growth of malignant melanoma cells. The protein contains a SH3 domain. MIA acts as a potent tumor cell growth inhibitor for malignant melanoma cells and some other neuroectodermal tumors, including gliomas, in an autocrine fashion. In a study of human melanoma cell lines with different metastatic capacity MIA mRNA expression appeared to be inversely correlated with pigmentation. MIA has been shown to represent a very sensitive and specific serum marker for systemic malignant melanoma that might be useful for staging of primary melanomas, detection of progression from localized to metastatic disease during follow-up, and monitoring therapy of advanced melanomas.

Biological Activity

The biological activity is calculated by the inhibiting effect on the invasion of Mel In Tumor cells and found active in Mel In assay.

Stability

Lyophilized MIA although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution MIA should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

Background

Melanoma Inhibitory Activity Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain consisting of 108 amino acids having a total molecular mass of 12237 Dalton. The MIA is purified by proprietary chromatographic techniques.

Caution: Product has not been fully validated for medical applications. For research use only.

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