83103 Avenue 48, Ste.1B #204 Coachella, CA 92236 USA Phone : +1.6268339877 Email : info@cali-bio.com

# **Product Datasheet**

Product Name Melanoma Inhibitory Activity Human Recombinant

Cata No CB500212

Source Escherichia Coli.

Synonyms Melanoma-derived growth regulatory protein precursor, Cartilage-derived retinoic

acid-sensitive protein, CD-RAP, MIA.

# **Description**

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.

Melanoma Inhibitory Activity Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain consisting of 108 amino having a total molecular mass of 12237 Dalton.

The MIA is purified by proprietary chromatographic techniques.

#### **Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried) powder.

# **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.

### **Purity**

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

#### **Formulation**

The protein was lyophilized from a concentrated (1.66mg/ml) solution containing 20mM Potassium-phosphate pH=7 and 150mM potassium chloride.

### **Stability**

Lyophilized MIA although stable at room temperature for 3 weeks, should be stored desiccated below -18℃. Upon reconstitution MIA should be stored at 4℃ between 2-7 days and for future use below

-18℃.

Please prevent freeze-thaw cycles.

#### Sequence

Agrees with the sequence of native MIA human with an addition N-terminal Methionine residue. MGPMPKLADRKLCADQECSSHPISMAVALQDYM APDCRFLTIHRGQVV YVFSLKGRGRFLWGGSVQGDYYGDLAARLGYFP

SSIVREDQTLKVDVKT

DKWDFYCO.

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