



PRODUCT DATA SHEET

Product: MIA (human recombinant)

Cat. No.: BC-307 (20 µg)

Description:

Melanoma inhibitory activity (MIA) protein is the first discovered member of a family of secreted cytokines termed the MIA/OTOR family. The four known members of this family; MIA, MIA2, OTOR, TANGO each contain a Src homology-3 (SH3)-like domain. MIA is an autocrine growth regulatory protein secreted from chondrocytes and malignant melanoma cells that promotes melanoma metastasis by binding competitively to fibronectin and laminin in a manner that results in melanoma cell detachment from the extracellular matrix *in vivo*. Elevated levels of MIA may represent a useful marker for melanoma metastasis as well as a potential marker for rheumatoid arthritis. Recombinant human MIA is a 12.2 kDa globular protein containing 108 amino acid residues including two intramolecular disulfide bonds.

Molecular Weight:

12.2 kDa

Source:

E. coli

Form:

Sterile filtered lyophilized powder.

Reconstitution:

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/mL. The solution can then be diluted into other aqueous buffers.

Storage and Stability:

Store lyophilized powder desiccated below 0°C. Reconstituted MIA should be stored at working aliquots at -20°C to avoid freeze thaw cycles. Antibody diluted into aqueous buffers can be stored for 1 week at 4°C or aliquoted and stored at -20°C for future use.

Purity:

>98% by SDS-PAGE and HPLC analysis. Endotoxin level is <0.1 ng per µg of human MIA.

Biological Activity:

The ED₅₀ was determined by the dose-dependent proliferation of the human A375 melanoma cell line. The expected ED₅₀ for this effect is 4-6 mg/mL.

Limitations:

For research use only. Not for use in diagnostics or in humans.

Warranty:

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.