

**DATASHEET**  
Version 20181206**MIA-2, Human****Cat. No.:** Z03337-1**Size:** 1.0 mg**Synonyms:** Human Melanoma Inhibitory Activity-2;  
Human MIA-2**Description:**

Melanoma inhibitory activity protein 2(MIA-2) is a secreted cytokine that is highly expressed in the liver and weakly in the testis. It is a member of the MIA/OTOR family. Members of this family such as MIA, OTOR, and TANGO share a Src homology-3 (SH3)-like domain. Melanoma inhibitory activity 2 is mapped to the gene locus of human chromosome 14q13. MIA and OTOR are exclusively expressed in the cartilage and cochlea, respectively, whereas MIA-2 is expressed exclusively in the liver. MIA-2 expression is transcriptionally regulated by the hepatocyte nuclear factor (HNF)-1-binding site). It is expressed in hepatocellular carcinoma (HCC) but not in bladder, breast, or prostate cancer. MIA-2 inhibits HCC growth and invasion, and consequently acts as a tumor suppressor.

Recombinant Human MIA-2 produced in *E. coli* cells is a single non-glycosylated polypeptide chain containing 100 amino acids. A fully biologically active molecule, rhMIA-2 has a molecular mass of 11.6 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

**Amino Acid Sequence:**

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00001 LESTKLLADL KKCGDLECEA LINRVSAMRD YRGPDCRYLN
00041 FTKGEEISVY VKLAGEREDL WAGSKGKEFG YFPRDAVQIE
00081 EVFISEEIQM STKESDFLCL
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**Source:** *E. coli***Biological Activity:** Not Available.**Molecular Weight:** 11.6 kDa, observed by reducing SDS-PAGE.**Formulation:** Lyophilized after extensive dialysis against PBS.**Reconstitution:** Reconstituted in ddH<sub>2</sub>O or PBS at 100 µg/ml.**Purity:** > 95% as analyzed by SDS-PAGE.**Endotoxin Level:** < 0.2 EU/µg, determined by LAL method.**Storage:** Lyophilized recombinant Human MIA-2 remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, HumanMIA-2 should be stable up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.