## PRODUCT DATA SHEET



# Bioworld Technology CO., Ltd.

# **MRP-S12 Peptide**

Cat No.: BS5803P

## **Background**

Mitochondrial ribosomes consist of a large 39S subunit and a small 28S subunit, both of which are comprised of multiple mitochondrial ribosomal proteins (MRPs) that are encoded by nuclear genes and are essential for protein synthesis within mitochondria. MRP-S12 (mitochondrial ribosomal protein S12) is a 138 amino acid protein that localizes to the mitochondrion, where it exists as a component of the 28S ribosomal subunit and works in conjunction with other MRPs to mediate protein synthesis. In response to mitochondrial stress, bidirectional MRP-S12 promoter activity is strongly stimulated, an event that happens to correlate with mitochondrial reactive oxidative species (ROS) production. Due to its specific location on human chromosome 19, the gene encoding MRP-S12 may be a candidate gene for susceptibility to aminoglycoside ototoxicity and for the autosomal dominant deafness gene DFNA4.

#### **Swiss-Prot**

O15235

## **Applications**

**Blocking** 

#### **Specificity**

This peptide can be used with studies using BS5803 MRP-S12 pAb.

## **Purification & Purity**

Synthetic peptide MRP-S12. (Note: the amino acid sequence is proprietary). The purity is > 98%.

#### **Product**

1 mg/ml in DI water.

### **Storage & Stability**

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at  $-20\,\mathrm{C}$  long term. Avoid freeze-thaw cycles.

#### **Research Use**

For research use only, not for use in diagnostic procedure.