

Datasheet

MRPL12 monoclonal antibody (M01), clone 3B12-1A3

Catalog Number: H00006182-M01

Regulatory Status: For research use only (RUO)

Product Description: Mouse monoclonal antibody raised against a full length recombinant MRPL12.

Clone Name: 3B12-1A3

Immunogen: MRPL12 (AAH02344, 1 a.a. ~ 198 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Sequence:

MLPAAARPLWGPCLGLRAAAFRLARRQVPCVCAVRH
MRSSGHQRCEALAGAPLDNAPKEYPPKIQQLVQDIAS
LTLLEISDLNELLKTKLIQDVLVPMGGVMSGAVPAA
AAQEAVEEDIPIAKERTHFTVRLTEAKPVDKVKLIKEIKN
YIQGINLVQAKKLVESLPQEIKANVAKAEAEKIKAALEA
VGGTVVLE

Host: Mouse

Reactivity: Human

Applications: ELISA, IF, IHC-P, RNAi-Ab, S-ELISA, WB-Ce, WB-Re, WB-Tr
(See our web site product page for detailed applications information)

Protocols: See our web site at <http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

Isotype: IgG1 kappa

Storage Buffer: In 1x PBS, pH 7.4

Storage Instruction: Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Entrez GeneID: 6182

Gene Symbol: MRPL12

Gene Alias: 5c5-2, FLJ60124, L12mt, MGC8610, MRP-L31/34, MRPL7, MRPL7/L12, RPML12

Gene Summary: Mammalian mitochondrial ribosomal proteins are encoded by nuclear genes and help in protein synthesis within the mitochondrion. Mitochondrial ribosomes (mitoribosomes) consist of a small 28S subunit and a large 39S subunit. They have an estimated 75% protein to rRNA composition compared to prokaryotic ribosomes, where this ratio is reversed. Another difference between mammalian mitoribosomes and prokaryotic ribosomes is that the latter contain a 5S rRNA. Among different species, the proteins comprising the mitoribosome differ greatly in sequence, and sometimes in biochemical properties, which prevents easy recognition by sequence homology. This gene encodes a 39S subunit protein which forms homodimers. In prokaryotic ribosomes, two L7/L12 dimers and one L10 protein form the L8 protein complex. [provided by RefSeq]

References:

1. A bifunctional protein regulates mitochondrial protein synthesis. Richman TR, Davies SM, Shearwood AM, Ermer JA, Scott LH, Hibbs ME, Rackham O, Filipovska A *Nucleic Acids Res.* 2014 Mar 5.
2. Oxygen Consumption Can Regulate the Growth of Tumors, a New Perspective on the Warburg Effect. Chen Y, Cairns R, Papandreou I, Koong A, Denko NC. *PLoS One.* 2009 Sep 15;4(9):e7033.
3. Human mitochondrial ribosomal protein MRPL12 interacts directly with mitochondrial RNA polymerase to modulate mitochondrial gene expression. Wang Z, Cotney J, Shadel GS. *J Biol Chem.* 2007 Apr 27;282(17):12610-8. Epub 2007 Mar 2.