## For Research Use Only

## MRPL51 Recombinant antibody

Catalog Number:83565-1-RR Feature

Featured Product



**Basic Information** 

Catalog Number: 83565-1-RR Size:

 Size:
 GeneID (NCBI):

 1000 ug/ml
 51258

 Source:
 UNIPROT ID:

 Rabbit
 Q4U2R6

Isotype: Full Name: IHC 1:200-1:800
IgG mitochondrial ribosomal protein L51 IF/ICC 1:50-1:500

Immunogen Catalog Number: Calculated MW: AG7193 15 kDa

Observed MW: 12 kDa

BC000191

GenBank Accession Number:

**Applications** 

Tested Applications: WB, IHC, IF/ICC, ELISA Species Specificity:

human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Purification Method: Protein A purfication

CloneNo.:

240381C3
Recommended Dilutions:

WB 1:5000-1:50000 IHC 1:200-1:800

Positive Controls:

WB: HUVEC cells, HEK-293 cells, SKOV-3 cells

IHC: human lung cancer tissue, human ovarian cancer

IF/ICC: HEK-293 cells,

## **Background Information**

Mitochondrial ribosome protein L51 (MRPL51) is a 39S subunit protein of the mitochondrial ribosome. MRPL51 functions in the translation of genetic messages (PMID: 21730110). MRPL51 expression was positively correlated with cell cycle, DNA damage, DNA repair, epithelial-mesenchymal transition, invasion, and proliferation of LUAD cells at the singlecell level (PMID: 37323822). The calculated molecular weight of MRPL51 is 15 kDa.

Storage

Storage:

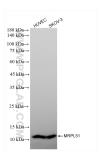
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

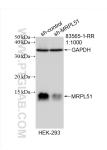
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

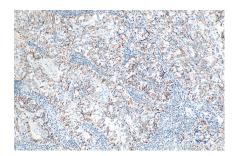
## Selected Validation Data



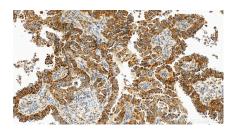
Various lysates were subjected to SDS PAGE followed by western blot with 83565-1-RR (MRPL51 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



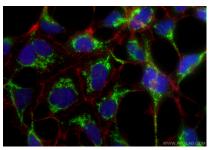
WB result of MRPL51 antibody (83565-1-RR; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MRPL51 transfected HEK-293



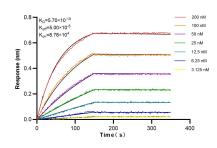
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 83565-1-RR (MRPL51 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human ovarian cancer slide using 83565-1-RR (MRPL51 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using MRPL51 antibody (83565-1-RR, Clone: 240381C3) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Biolayer interferometry (BLL) kinetic assays of 83565-1-RR against Human MRPL51 were performed. The affinity constant is 0.57 nM.