

## MRPS31 Polyclonal Antibody

catalog number: E-AB-64377

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Description

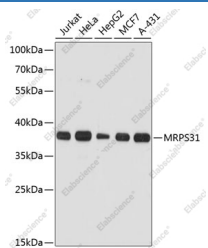
|                     |                                                                                    |
|---------------------|------------------------------------------------------------------------------------|
| <b>Reactivity</b>   | Human;Rat                                                                          |
| <b>Immunogen</b>    | Recombinant fusion protein of human MRPS31 (NP_005821.2).                          |
| <b>Host</b>         | Rabbit                                                                             |
| <b>Isotype</b>      | Rabbit IgG                                                                         |
| <b>Purification</b> | Affinity purification                                                              |
| <b>Buffer</b>       | Phosphate buffered solution, pH 7.4, containing 0.05% stabilizer and 50% glycerol. |

### Applications

### Recommended Dilution

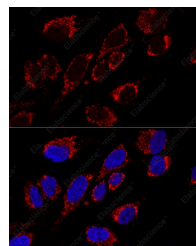
|           |              |
|-----------|--------------|
| <b>WB</b> | 1:500-1:2000 |
| <b>IF</b> | 1:50-1:200   |

### Data



Western blot analysis of extracts of various cell lines using MRPS31 Polyclonal Antibody at dilution of 1:3000.

**Observed-MW:37 kDa**  
**Calculated-MW:45 kDa**



Confocal immunofluorescence analysis of U2OS cells using MRPS31 Polyclonal Antibody at dilution of 1:200. Blue: DAPI for nuclear staining.

### Preparation & Storage

|                 |                                                                                                          |
|-----------------|----------------------------------------------------------------------------------------------------------|
| <b>Storage</b>  | Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.                                          |
| <b>Shipping</b> | The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended. |

### Background

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. The 28S subunit of the mammalian mitoribosome may play a crucial and characteristic role in translation initiation. This gene encodes a 28S subunit protein that has also been associated with type 1 diabetes; however, its relationship to the etiology of this disease remains to be clarified. Pseudogenes corresponding to this gene have been found on chromosomes 3 and 13.

### For Research Use Only

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