

**MRPL40 antibody - middle region**  
**Rabbit Polyclonal Antibody**  
**Catalog # AI14830**

**Specification**

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**MRPL40 antibody - middle region - Product Information**

Application	WB
Primary Accession	<a href="#">P15927</a>
Other Accession	<a href="#">NM_002946</a> , <a href="#">NP_002937</a>
Reactivity	Human, Mouse, Rat, Rabbit, Horse, Guinea Pig
Predicted Host	Human, Guinea Pig
Clonality	Rabbit
Calculated MW	Polyclonal 23kDa KDa

**MRPL40 antibody - middle region - Additional Information**

**Gene ID** 6118

**Alias Symbol** **FLJ41774, MGC9400, MRP-L22, NLVCF, URIM**

**Other Names**

Replication protein A 32 kDa subunit, RP-A p32, Replication factor A protein 2, RF-A protein 2, Replication protein A 34 kDa subunit, RP-A p34, RPA2, REPA2, RPA32, RPA34

**Format**

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

**Reconstitution & Storage**

Add 50 ul of distilled water. Final anti-MRPL40 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

**Precautions**

MRPL40 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

**MRPL40 antibody - middle region - Protein Information**

**Name** RPA2

**Synonyms** REPA2, RPA32, RPA34

**Function**

As part of the heterotrimeric replication protein A complex (RPA/RP-A), binds and stabilizes single-stranded DNA intermediates that form during DNA replication or upon DNA stress. It prevents their reannealing and in parallel, recruits and activates different proteins and complexes involved in DNA metabolism. Thereby, it plays an essential role both in DNA replication and the

cellular response to DNA damage. In the cellular response to DNA damage, the RPA complex controls DNA repair and DNA damage checkpoint activation. Through recruitment of ATRIP activates the ATR kinase a master regulator of the DNA damage response. It is required for the recruitment of the DNA double-strand break repair factors RAD51 and RAD52 to chromatin in response to DNA damage. Also recruits to sites of DNA damage proteins like XPA and XPG that are involved in nucleotide excision repair and is required for this mechanism of DNA repair. Also plays a role in base excision repair (BER) probably through interaction with UNG. Also recruits SMARCAL1/HARP, which is involved in replication fork restart, to sites of DNA damage. May also play a role in telomere maintenance. RPA stimulates 5'-3' helicase activity of BRIP1/FANCD1 (PubMed: <a href="http://www.uniprot.org/citations/17596542" target="\_blank">17596542</a>).

#### Cellular Location

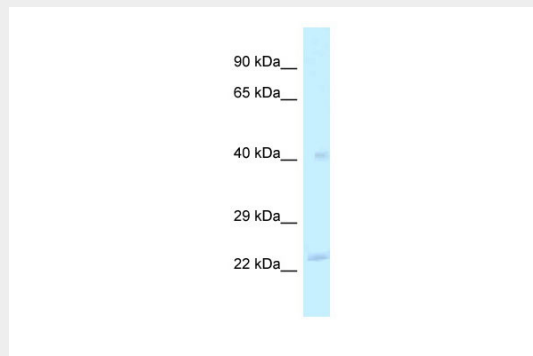
Nucleus. Nucleus, PML body. Note=Redistributes to discrete nuclear foci upon DNA damage in an ATR-dependent manner

#### MRPL40 antibody - middle region - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### MRPL40 antibody - middle region - Images



WB Suggested Anti-MRPL40 Antibody Titration: 1.0 µg/ml  
Positive Control: Fetal Liver

#### MRPL40 antibody - middle region - References

- Erdile L.F., et al. *J. Biol. Chem.* 265:3177-3182(1990).  
Ebert L., et al. Submitted (MAY-2004) to the EMBL/GenBank/DDBJ databases.  
Gregory S.G., et al. *Nature* 441:315-321(2006).  
Din S., et al. *Genes Dev.* 4:968-977(1990).  
Dutta A., et al. *EMBO J.* 11:2189-2199(1992).