

# MRPL40 antibody - middle region

Rabbit Polyclonal Antibody Catalog # AI14830

#### **Product Information**

Application WB Primary Accession P15927

Other Accession <u>NM 002946, NP 002937</u>

**Reactivity** Human, Mouse, Rat, Rabbit, Guinea Pig, Horse

**Predicted** Human, Guinea Pig

Host Rabbit
Clonality Polyclonal
Calculated MW 29247

#### **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.

#### **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/FANCI (PubMed:17596542).

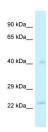
#### **Cellular Location**

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

### 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).

## **Images**



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.