

TCAB1 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58902**Specification****TCAB1 Polyclonal Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	O9BUR4
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	59309

TCAB1 Polyclonal Antibody - Additional Information**Gene ID** 55135**Other Names**

Telomerase Cajal body protein 1, WD repeat-containing protein 79, WD40 repeat-containing protein antisense to TP53 gene, WRAP53beta, WRAP53 {ECO:0000303|PubMed:19250907, ECO:0000312|HGNC:HGNC:25522}

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

TCAB1 Polyclonal Antibody - Protein Information**Name** WRAP53 {ECO:0000303|PubMed:19250907, ECO:0000312|HGNC:HGNC:25522}**Function**

RNA chaperone that plays a key role in telomere maintenance and RNA localization to Cajal bodies (PubMed:29695869, PubMed:29804836). Specifically recognizes and binds the Cajal body box (CAB box) present in both small Cajal body RNAs (scaRNAs) and telomerase RNA template component (TERC) (PubMed:19285445, PubMed:20351177, PubMed:29695869, PubMed:29804836). Essential component of the telomerase holoenzyme complex, a ribonucleoprotein complex essential for the replication of chromosome termini that elongates telomeres in most eukaryotes (PubMed:19179534, PubMed:20351177, PubMed:26170453, PubMed:26170453, PubMed:26170453).

[29695869](http://www.uniprot.org/citations/29695869)). In the telomerase holoenzyme complex, required to stimulate the catalytic activity of the complex (PubMed:[27525486](http://www.uniprot.org/citations/27525486)), PubMed:[29804836](http://www.uniprot.org/citations/29804836)). Acts by specifically binding the CAB box of the TERC RNA, a critical step for telomerase activity (PubMed:[29804836](http://www.uniprot.org/citations/29804836)). In addition, also controls telomerase holoenzyme complex localization to Cajal body (PubMed:[22547674](http://www.uniprot.org/citations/22547674)). During S phase, required for delivery of TERC to telomeres during S phase and for telomerase activity (PubMed:[29804836](http://www.uniprot.org/citations/29804836)). In addition to its role in telomere maintenance, also required for Cajal body formation, probably by mediating localization of scaRNAs to Cajal bodies (PubMed:[19285445](http://www.uniprot.org/citations/19285445), PubMed:[21072240](http://www.uniprot.org/citations/21072240)). Also plays a role in DNA repair: phosphorylated by ATM in response to DNA damage and relocalizes to sites of DNA double-strand breaks to promote the repair of DNA double-strand breaks (PubMed:[25512560](http://www.uniprot.org/citations/25512560), PubMed:[27715493](http://www.uniprot.org/citations/27715493)). Acts by recruiting the ubiquitin ligase RNF8 to DNA breaks and promote both homologous recombination (HR) and non-homologous end joining (NHEJ) (PubMed:[25512560](http://www.uniprot.org/citations/25512560), PubMed:[27715493](http://www.uniprot.org/citations/27715493)).

Cellular Location

Nucleus, Cajal body. Chromosome, telomere. Chromosome. Note=Released from telomerase RNA template component (TERC) in mitotic cells coincident with delocalization from Cajal bodies (PubMed:26170453). In response to DNA damage, localizes to sites of DNA double-strand breaks following phosphorylation by ATM (PubMed:26734725, PubMed:27715493)

Tissue Location

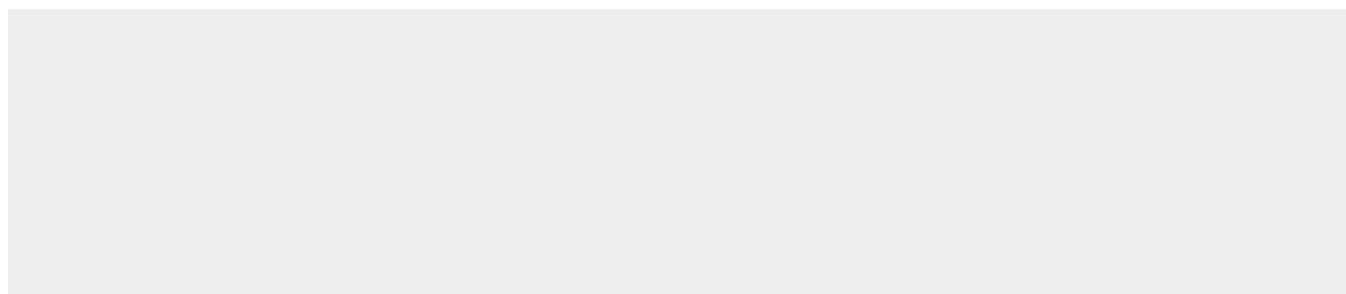
Expressed in all tissues and cell lines examined.

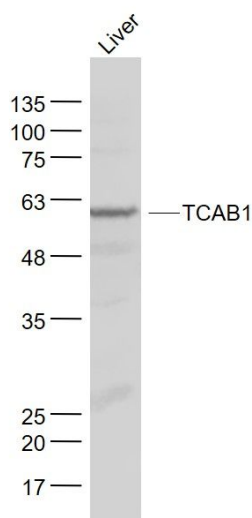
TCAB1 Polyclonal Antibody - Protocols

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](#)

TCAB1 Polyclonal Antibody - Images





Sample:

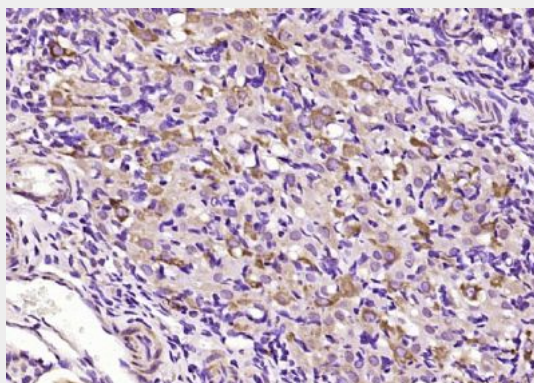
Liver (Mouse) Lysate at 40 ug

Primary: Anti- TCAB1 (bs-8163R) at 1/1000 dilution

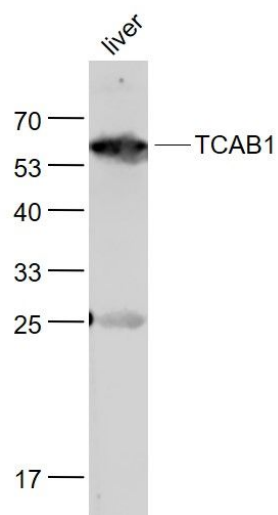
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 60 kD

Observed band size: 60 kD



Paraformaldehyde-fixed, paraffin embedded (rat ovary tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (TCAB1) Polyclonal Antibody, Unconjugated (bs-8163R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Sample:

Liver (Mouse) Lysate at 40 ug

Primary: Anti- TCAB1 (bs-8163R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 60 kD

Observed band size: 60 kD