

PALB2 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11688c

Specification

PALB2 Antibody (Center) - Product Information

Application	WB, FC,E
Primary Accession	Q86YC2
Other Accession	NP_078951.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	131295
Antigen Region	546-574

PALB2 Antibody (Center) - Additional Information

Gene ID 79728

Other Names

Partner and localizer of BRCA2, PALB2, FANCN

Target/Specificity

This PALB2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 546-574 amino acids from the Central region of human PALB2.

Dilution

WB~~1:1000

FC~~1:10~50

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PALB2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

PALB2 Antibody (Center) - Protein Information

Name PALB2

Synonyms FANCN

Function Plays a critical role in homologous recombination repair (HRR) through its ability to recruit BRCA2 and RAD51 to DNA breaks (PubMed:[16793542](#), PubMed:[19369211](#), PubMed:[19423707](#), PubMed:[22941656](#), PubMed:[24141787](#), PubMed:[28319063](#)). Strongly stimulates the DNA strand- invasion activity of RAD51, stabilizes the nucleoprotein filament against a disruptive BRC3-BRC4 polypeptide and helps RAD51 to overcome the suppressive effect of replication protein A (RPA) (PubMed:[20871615](#)). Functionally cooperates with RAD51AP1 in promoting of D-loop formation by RAD51 (PubMed:[20871616](#)). Serves as the molecular scaffold in the formation of the BRCA1-PALB2-BRCA2 complex which is essential for homologous recombination (PubMed:[19369211](#)). Via its WD repeats is proposed to scaffold a HR complex containing RAD51C and BRCA2 which is thought to play a role in HR-mediated DNA repair (PubMed:[24141787](#)). Essential partner of BRCA2 that promotes the localization and stability of BRCA2 (PubMed:[16793542](#)). Also enables its recombinational repair and checkpoint functions of BRCA2 (PubMed:[16793542](#)). May act by promoting stable association of BRCA2 with nuclear structures, allowing BRCA2 to escape the effects of proteasome-mediated degradation (PubMed:[16793542](#)). Binds DNA with high affinity for D loop, which comprises single-stranded, double-stranded and branched DNA structures (PubMed:[20871616](#)). May play a role in the extension step after strand invasion at replication-dependent DNA double-strand breaks; together with BRCA2 is involved in both POLH localization at collapsed replication forks and DNA polymerization activity (PubMed:[24485656](#)).

Cellular Location

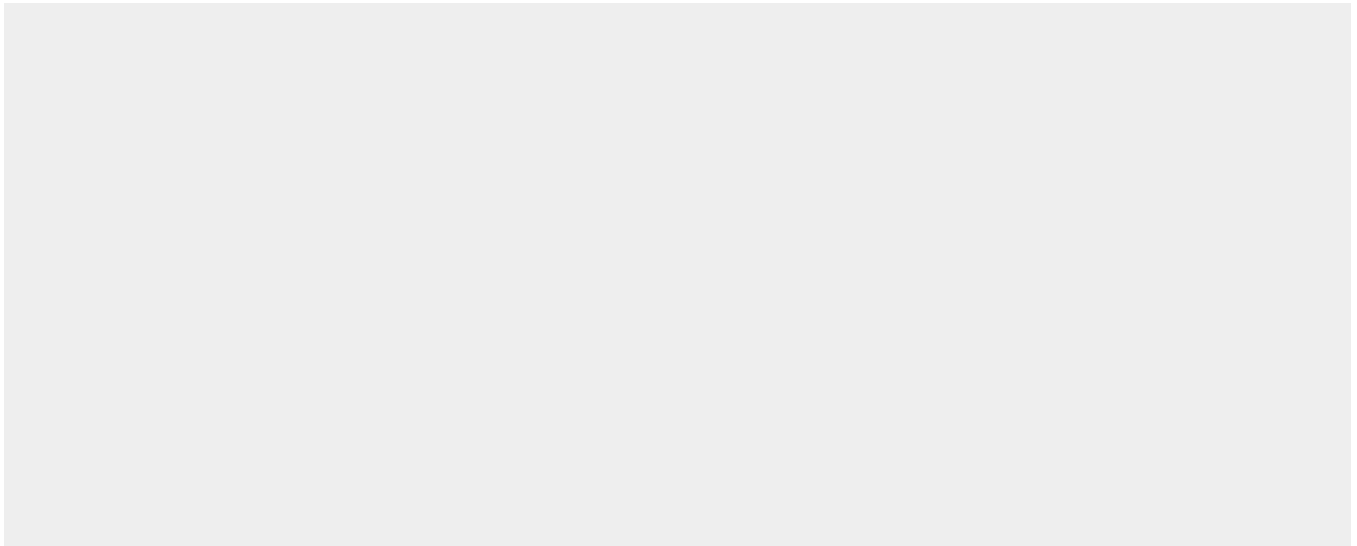
Nucleus Note=Colocalizes with BRCA2 and BRCA1 in nuclear foci

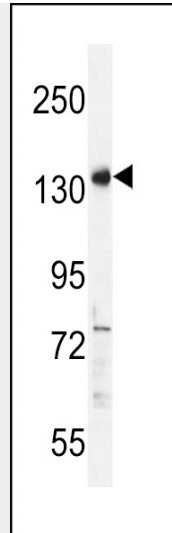
PALB2 Antibody (Center) - Protocols

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

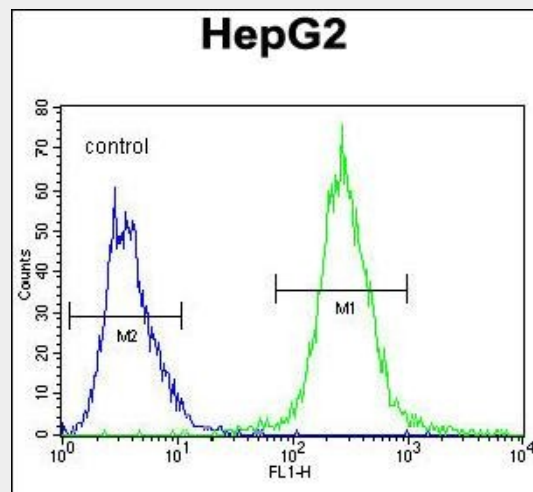
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PALB2 Antibody (Center) - Images





PALB2 Antibody (Center) (Cat. #AP11688c) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the PALB2 antibody detected the PALB2 protein (arrow).



PALB2 Antibody (Center) (Cat. #AP11688c) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

PALB2 Antibody (Center) - Background

This gene encodes a protein that may function in tumor suppression. This protein binds to and colocalizes with the breast cancer 2 early onset protein (BRCA2) in nuclear foci and likely permits the stable intranuclear localization and accumulation of BRCA2.

PALB2 Antibody (Center) - References

- Dray, E., et al. Nat. Struct. Mol. Biol. 17(10):1255-1259(2010)
- Buisson, R., et al. Nat. Struct. Mol. Biol. 17(10):1247-1254(2010)
- Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
- Adank, M.A., et al. Pediatr Blood Cancer 55(4):742-744(2010)
- Guenard, F., et al. Genet Test Mol Biomarkers 14(4):515-526(2010)