

For Research Use Only

POLG Recombinant antibody

Catalog Number: 83670-1-RR



Basic Information

Catalog Number: 83670-1-RR	GenBank Accession Number: BC042571	Purification Method: Protein A purification
Size: 1000 µg/ml	GeneID (NCBI): 5428	CloneNo.: 240441D2
Source: Rabbit	UNIPROT ID: P54098	Recommended Dilutions: WB 1:5000-1:50000
Isotype: IgG	Full Name: polymerase (DNA directed), gamma	
Immunogen Catalog Number: AG5256	Calculated MW: 140 kDa	
	Observed MW: 140 kDa	

Applications

Tested Applications: WB, ELISA	Positive Controls: WB : HeLa cells, rat brain tissue, rat testis tissue, HepG2 cells, HEK-293T cells, MCF-7 cells
Species Specificity: human, rat	

Background Information

POLG (DNA polymerase gamma) is composed of a C-terminal polymerase ('pol') domain and an amino-terminal exonuclease ('exo') domain. The exo domain increases the fidelity of mitochondrial DNA replication by conferring a proofreading activity to the enzyme (PMID: 12210792). Catalytic subunit of POLG solely responsible for replication of mitochondrial DNA (mtDNA). Replicates both heavy and light strands of the circular mtDNA genome using a single-stranded DNA template, RNA primers and the four deoxyribonucleoside triphosphates as substrates (PMID:11477093; 11897778; 15917273; 19837034; 9558343).

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

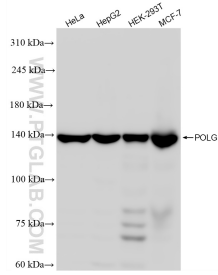
T: 4006900926

E: Proteintech-CN@ptglab.com

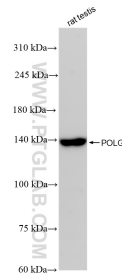
W: ptgcn.com

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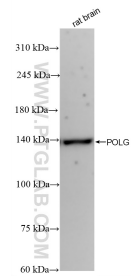
Selected Validation Data



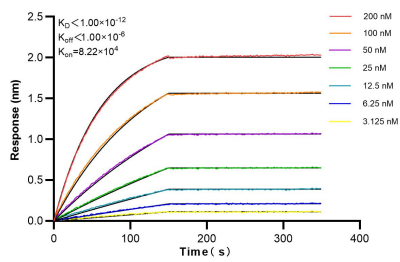
Various lysates were subjected to SDS PAGE followed by western blot with 83670-1-RR (POLG antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



rat testis tissue were subjected to SDS PAGE followed by western blot with 83670-1-RR (POLG antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



rat brain tissue were subjected to SDS PAGE followed by western blot with 83670-1-RR (POLG antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Biolayer interferometry (BLI) kinetic assays of 83670-1-RR against Human POLG were performed. The affinity constant is below 1 pM.