



DNA pol γ2 Polyclonal Antibody

Catalog No	YP-Ab-01656
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	IHC;IF;ELISA
Gene Name	POLG2
Immunogen	The antiserum was produced against synthesized peptide derived from human POLG2. AA range:291-340
Specificity	DNA pol γ2 Polyclonal Antibody detects endogenous levels of DNA pol γ2 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	DNA polymerase subunit gamma-2;MTPOLB;p55;PEOA4;POLGB;DNA pol γ2; POLG2;DNA polymerase subunit gamma-2 mitochondrial;mitochondrial;DNA polymerase gamma accessory 55 kDa subunit;Mitochondrial DNA polymerase accessory subunit;PolG-beta
Observed Band	
Calculated Molecular Weight	
Cell Pathway	Mitochondrion.
Tissue Specificity	Cerebellum,Cervix,Ovary,
Function	catalytic activity:Deoxynucleoside triphosphate + DNA(n) = diphosphate + DNA(n+1).,disease:Defects in POLG2 are the cause of progressive external ophthalmoplegia with mitochondrial DNA deletions autosomal dominant type 4 (PEOA4) [MIM:610131]. Progressive external ophthalmoplegia is characterized by progressive weakness of ocular muscles and levator muscle of the upper eyelid. In a minority of cases, it is associated with skeletal myopathy, which predominantly involves axial or proximal muscles and which causes abnormal fatigability and even permanent muscle weakness. Ragged-red fibers and



atrophy are found on muscle biopsy. A large proportion of chronic ophthalmoplegias are associated with other symptoms, leading to a multisystemic pattern of this disease. Additional symptoms are variable, and may include cataracts, hearing loss, sensory axonal neuropathy, ataxia, depression, hypogonadism

Background

This gene encodes the processivity subunit of the mitochondrial DNA polymerase gamma. The encoded protein forms a heterotrimer containing one catalytic subunit and two processivity subunits. This protein enhances DNA binding and promotes processive DNA synthesis. Mutations in this gene result in autosomal dominant progressive external ophthalmoplegia with mitochondrial DNA deletions.[provided by RefSeq, Sep 2009],

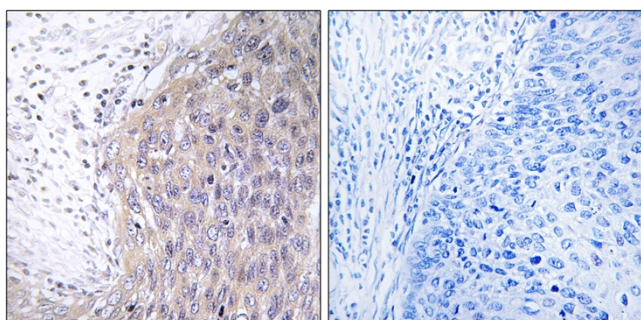
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Immunohistochemistry analysis of paraffin-embedded human cervix carcinoma tissue, using POLG2 Antibody. The picture on the right is blocked with the synthesized peptide.