ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Mouse DNA Primase, p49 Antibodies

Cat # DNPR13-A Rabbit Anti-Mouse DNA primase, p49, IgG # 1 **SIZE**: 100 ug

In the eukaryotic cell, DNA primase initiates DNA replication by the synthesis of small ribonucleotides called primers. The eukaryotic primase is composed of two subunits, **p49 (**human 420 aa; chromosome 12q13) **and p58 (**human 509 aa**,** chromosome 6p12-p11.1)**,** which purify as a complex tightly bound to DNA polymerase alpha. Primase initiates synthesis with a triphosphate purine moiety at the 5'-end. After synthesis of 7-10 ribonucleotides, the primer-template is translocated intramolecularly to the active site of the DNA polymerase alpha subunit. The p49 subunit of DNA primase contains the catalytic active site. Residue 104-111 are most critical for primer synthesis. Alanine substitution in residues Glu, Asp, and these residues may form part of a conserved carboxylic triad also observed in the active sites of DNA polymerases and reverse transcriptases.

Source of Antigen and Antibodies

Purified **mouse recombinant DNA primase, p49** was injected into **rabbits.** Antibody has been purified by Protein A/G column chromatography.

Antigen	Purified **mouse recombinant DNA primase,**
Ab Host/type	Rabbit, Polyclonal IgG, purified over antigen-agarose (Cat # DNPR13-A)
2-Ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
-ve control IgG	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as –ve control

Form & Storage

Affinity pure IgG

100 ug/100ul

solution lyophilized powder

Buffer: PBS, pH 7.5, 0.2% BSA and 0.05% sodium azide

Reconstitute powder PBS at 1 mg/ml

Storage

Short-term: unopened, undiluted vials for less than a week at 4oC.

Long-term: at –20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20oC or below.

Shipping: 4oC for solutions and room temp for powder

Recommended Usage

Western Blotting: An initial concn. of 1-5 ug/ml is recommended for Western. Users must optimize antibody dilution depending upon the nature of samples and other technical conditions. DNA primase, 49 is ~ 49 kda. HeLa cells or or other tumor cells cab be used as positive controls.

Histochemistry & Immunofluorescence: Not tested. An initial concn. 2-20 ug/ml is recommended for IHC.

Specificity & Cross-reactivity

DNPR13-A reacts with human and mouse 49 subunit. No reactivity is seen with p58 subunit. Antibody cross-reactivity in various other species has not been studied.

General References: (1) Stadlbauer F et al (1994) Eur. J. Biochem. 222, 781; Cloutier S et al (1997) Genomics 43, 398; Adlear DA et al (1991) Genomics 9, 642; Shiratori A et al (1997) Genomics 44, 251; Prussak CE et al (1989) JBC 264; 4957

***This product is for In vitro research use only.**

Material Safety Data. Unless specified otherwise, the material contains negligible amounts of sodium azide (0.1%) as preservative. Appropriate care should be exercised when handling and disposing this material.

Related material available from ADI

Antibodies to MGMT, hNTH, Ape, mutY, OGG1, XRCC1, DNA Ligase, Polymerase, XPG, ORC1 etc are available.

Anti-Rabbit IgG-HRP Conjugate and ECL Reagents

Western Blot Recycling Kit (Strips blots in 5 minutes) and re-use the same blot with multiple antibodies

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