

## **Product datasheet for AP20553PU-N**

## MYH (MUTYH) Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

**Applications:** IF, IHC, WB

Recommended Dilution: Western blot: 1/500-1/1000.

Immuofluorescence: 1/50-1/200.

**Immunohistochemistry on Paraffin Sections:** 1/50-1/200.

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

Clonality: Polyclonal

**Specificity:** This antibody detects endogenous levels of MYH protein.

(region surrounding Tyr176)

**Formulation:** Phosphate buffered saline (PBS), pH~7.2

State: Aff - Purified

State: Liquid purified Ig fraction (> 95% (by SDS-PAGE)

Preservative: 0.05% Sodium Azide

**Concentration:** 1.0 mg/ml

**Purification:** Affinity Chromatography using epitope-specific immunogen

**Conjugation:** Unconjugated

**Storage:** Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Predicted Protein Size:** ~68 kDa

**Gene Name:** mutY DNA glycosylase

Database Link: Entrez Gene 70603 MouseEntrez Gene 170841 RatEntrez Gene 4595 Human

Q9UIF7



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Background:

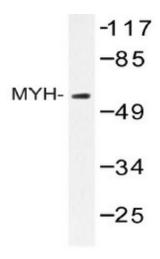
MYH (mutY homolog (E. coli )) is a DNA glycosylase mismatch repair enzyme that in conjunction with mutM (OGG1), cleaves adenine residues paired with either oxidized (8-hydroxyguanines) or non-modified guanines in order to correct A/G and A/C mismatches. Repair of most modified and mispaired bases in the genome is initiated by DNA glycosylases, which bind and cleave N-glycosyl bonds to initiate base excision repair. MYH is crucial for the avoidance of mutations resulting from oxidative DNA damage. Multiple N-terminal splice variants of MYH exist in mammalian cells. Increasing levels of MYH in A549 cells exposed to oxygen and infrared radiation leads to improvements in cell survival. Biallelic MYH germ-line mutations predispose humans to colorectal adenomas and carcinomas. MYH is abundant in neurons where mitochondrial genomes exposed to reactive oxygen species (ROS) that damage DNA must maintain integrity over the entire mammalian life span.

Synonyms: MYH, MutY homolog

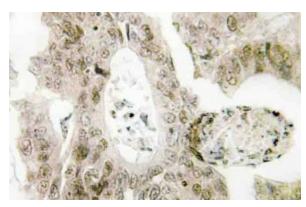
**Protein Families:** Druggable Genome, Stem cell - Pluripotency

**Protein Pathways:** Base excision repair

## **Product images:**



Western blot analysis of MUTYH antibody (Cat.-No AP20553PU-N) in extracts from HepG2 cells.



Immunohistochemistry analysis of MUTYH antibody (Cat.-No AP20553PU-N) in paraffinembedded human colon carcinoma tissue.