

## Datasheet

### MUTYH monoclonal antibody (M01), clone 4D10

**Catalog Number:** H00004595-M01

**Regulation Status:** For research use only (RUO)

**Product Description:** Mouse monoclonal antibody raised against a partial recombinant MUTYH.

**Clone Name:** 4D10

**Immunogen:** MUTYH (AAH03178, 436 a.a. ~ 535 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Sequence:**

KLTYQVYGLALEGQTPVTTVPPGARWLTQEEFHTAAV  
STAMKKVFRVYQGQPGTCMGSKRSQVSSPCSRKK  
PRMGQQVLDNFFRSHISTDAHSLNSAAQ

**Host:** Mouse

**Reactivity:** Human

**Applications:** ELISA, IP, RNAi-Ab, S-ELISA, WB-Ce, WB-Re, WB-Tr  
(See our web site product page for detailed applications information)

**Protocols:** See our web site at  
<http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

**Isotype:** IgG1 Kappa

**Storage Buffer:** In 1x PBS, pH 7.4

**Storage Instruction:** Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Entrez GeneID:** 4595

**Gene Symbol:** MUTYH

**Gene Alias:** MGC4416, MYH

**Gene Summary:** This gene encodes a DNA glycosylase involved in oxidative DNA damage repair. The enzyme excises adenine bases from the DNA backbone at sites

where adenine is inappropriately paired with guanine, cytosine, or 8-oxo-7,8-dihydroguanine, a major oxidatively damaged DNA lesion. The protein is localized to the nucleus and mitochondria. Mutations in this gene result in heritable predisposition to colon and stomach cancer. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq]

**References:**

1. Human MutY homolog induces apoptosis in etoposide-treated HEK293 cells. Hahm SH, Chung JH, Agustina L, Han SH, Yoon IS, Park JH, Kang LW, Park JW, Na JJ, Han YS. *Oncol Lett.* 2012 Dec;4(6):1203-1208. Epub 2012 Sep 19.
2. Cancer-associated variants and a common polymorphism of MUTYH exhibit reduced repair of oxidative DNA damage using a GFP-based assay in mammalian cells. Raetz AG, Xie Y, Kundu S, Brinkmeyer MK, Chang C, David SS. *Carcinogenesis.* 2012 Sep 20. [Epub ahead of print]
3. Reduced expression of MUTYH with suppressive activity against mutations caused by 8-hydroxyguanine is a novel predictor of a poor prognosis in human gastric cancer. Shinmura K, Goto M, Suzuki M, Tao H, Yamada H, Igarashi H, Matsuura S, Maeda M, Konno H, Matsuda T, Sugimura H. *The Journal of Pathology* DOI: 10.1002/path.2953