

Anti-MPG Antibody

Catalog # ABO11133

Product Information

Application	WB
Primary Accession	P29372
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for DNA-3-methyladenine glycosylase(MPG) detection. Tested with WB in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	4350
Other Names	DNA-3-methyladenine glycosylase, 3.2.2.21, 3-alkyladenine DNA glycosylase, 3-methyladenine DNA glycosidase, ADPG, N-methylpurine-DNA glycosylase, MPG, AAG, ANPG, MID1
Calculated MW	32869
Application Details	Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse
Subcellular Localization	Cytoplasm . Mitochondrion matrix, mitochondrion nucleoid . Nucleus .
Source	Eukaryota
Protein Name	DNA-3-methyladenine glycosylase
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human MPG(228-243aa NKSFDQRDLAQDEAVW), different from the related mouse sequence by two amino acids, and from related rat sequence by one amino acid.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated

Sequence Similarities

freezing and thawing.
Belongs to the DNA glycosylase MPG family.

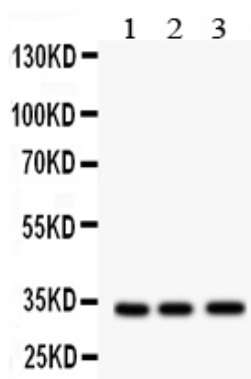
Protein Information

Name	MPG
Synonyms	AAG, ANPG, MID1
Function	Hydrolysis of the deoxyribose N-glycosidic bond to excise 3- methyladenine, and 7-methylguanine from the damaged DNA polymer formed by alkylation lesions.
Cellular Location	Cytoplasm. Mitochondrion matrix, mitochondrion nucleoid. Nucleus

Background

MPG(N-methylpurine-DNA glycosylase) also known as MDG, 3-METHYLADENINE DNA GLYCOSYLASE, 3MeAde DNA GLYCOSYLASE, AAG or APNG. The MPG gene is mapped to human chromosome 16 by analysis of a panel of DNAs from mouse/human and hamster/human hybrid cell lines. The MPG gene was expressed in all cell lines and tissues examined, but was found at particularly high levels in a colon adenocarcinoma cell line(HT29). The completely characterized human MPG gene was found to span 7 to 8 kb of genomic DNA and to be localized 75 kb upstream of the embryonic zeta-globin gene. To assess the contribution of Apng to the repair of several mutagenic lesions in vivo, Hang et al.(1997) biochemically analyzed cell-free extracts of tissues from mice with a targeted deletion of the Apng gene. Following treatment with DNA-methylating agents, increased persistence of 7-methylguanine(meG) was found in liver sections of APNG knockout mice in comparison with wildtype mice, demonstrating an in vivo phenotype for the APNG-null animals.

Images



Anti- MPG antibody, ABO11133, Western blottingAll lanes:
Anti MPG (ABO11133) at 0.5ug/mlLane 1: Rat Liver Tissue
Lysate at 50ugLane 2: HELA Whole Cell Lysate at
40ugLane 3: JURKAT Whole Cell Lysate at 40ugPredicted
bind size: 33KDObserved bind size: 33KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.