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Anti-MPG Antibody

Catalog # AP51761

Product Information

Application	WB, IF/IC
Primary Accession	P29372
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	32869

Additional Information

Gene ID	4350
Other Names	AAG; ANPG; MID1; DNA-3-methyladenine glycosylase; 3-alkyladenine DNA glycosylase; 3-methyladenine DNA glycosidase; ADPG; N-methylpurine-DNA glycosylase
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human MPG. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

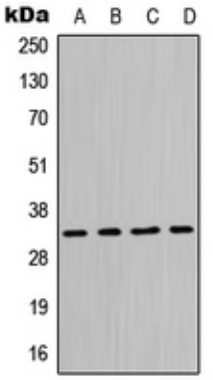
Name	MPG
Synonyms	AAG, ANPG, MID1
Function	Hydrolysis of the deoxyribose N-glycosidic bond to excise 3- methyladenine, and 7-methylguanine from the damaged DNA polymer formed by alkylation lesions.
Cellular Location	Cytoplasm. Mitochondrion matrix, mitochondrion nucleoid. Nucleus

References

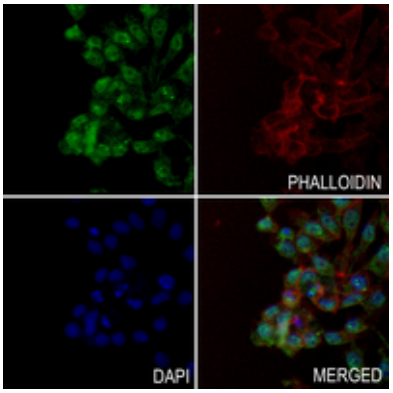
Samson L.,et al.Proc. Natl. Acad. Sci. U.S.A. 88:9127-9131(1991).
Vickers M.A.,et al.Proc. Natl. Acad. Sci. U.S.A. 90:3437-3441(1993).

Kim J.W.,et al.Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases.
Daniels R.J.,et al.Hum. Mol. Genet. 10:339-352(2001).
Martin J.,et al.Nature 432:988-994(2004).

Images



Western blot analysis of MPG expression in Jurkat (A), HeLa (B), Raw264.7 (C), PC12 (D) whole cell lysates. (Predicted band size: 30; 32 kD; Observed band size: 32 kD)



Immunofluorescent analysis of MPG staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).