

Mouse 8-Oxoguanine DNA Glycosylase (mOGG1) Antibodies

Cat # mOGG13-P	mOGG1 Control peptide #3	SIZE: 100 ug
Cat # mOGG13-S	Rabbit Anti-mOGG1 antiserum # 3	SIZE: 100 ul
Cat # mOGG13-A	Rabbit Anti-mOGG1 IgG # 3, aff pure	SIZE: 100 ug
Cat # mOGG13-C	Recombinant, purified, mOGG1 protein control for WB	SIZE: 100 ul

Mouse 8-Oxoguanine DNA Glycosylase 1 (mOGG1; 345 aa) is involved in the excision of 7, 8-dihydro-8-oxoguanine produced as a result of DNA damage. This gene has been localized on human chromosome 3p25. Several forms of hOGG protein have been cloned differing in lengths (351-424 aa) (refs 1). 8-Oxoguanine-DNA glycosylase (OGG1) is a DNA repair protein that is primarily responsible for the repair of 8-oxoguanine (8-oxo-G). It possesses both DNA glycosylase and AP (apurinic) lyase activity and is a functional analog of the bacteria Fpg protein. OGG1 releases 8-oxoguanine (8-oxo-G) from mutated DNA and nicks the DNA strand. Although its glycosidase activity is very efficient, its lyase activity is weak and is highest for substrates having a C as the opposite base. OGG1 is a b-lyase generating an □ □-unsaturated sugar moiety at the 3'-terminus. Murine OGG1 is a 345 amino acid protein of 38.8 kDa. It displays 84% identity to the human OGG1.

Source of Antigen and Antibodies

Antigen	18-aa peptide of mouse Mogg1 (1) ; Designated (MOGG13-P or control peptide) conjugated to KLH
Location	~N-terminal
Ab Host/type	Rabbit, Polyclonal antiserum # MOGG13-S and IgG, purified over antigen-agarose (Cat # MOGG13-A)
2-Ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
-ve	Cat # 20009-1, Rabbit (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as -ve control

Mouse OGG1 (1-345 aa; ~39 kDa) was expressed in E. coli and purified >90%. This preparation is not biologically active. It is not suitable for ELISA or other techniques. ADI provides another preparation of active enzyme (**Cat # MOGG25R-5**). For **western blot +ve control (Cat # MOGG13-C)**, it is supplied in SDS-PAGE sample buffer (reduced). Load ~10 ul/lane to visualize with antibodies (Cat # **MOGG13-S** or **MOGG13-A**). Store at -20oC to -80oC in suitable aliquots. Do not freeze and thaw. Heat once prior to loading on gels.

Form & Storage of Antibodies/Peptide Control

Antiserum (unpurified)
00ul solution lyophilized powder
Supplied in Buffer: 0.05% azide
Reconstitute powder in 100 ul PBS

Affinity pure IgG

100 ug/100ul solution lyophilized powder
Supplied in **Buffer:** PBS+0.1% BSA
Reconstitute powder in PBS at 1mg/ml

Control/blocking peptide

100 ug/100 ul solution lyophilized powder
Supplied in Buffer: PBS pH 7.5,
Reconstitute powder in PBS at 1 mg/ml.

Storage

Short-term: unopened, undiluted liquid vials at -20oC and powder at 4oC or -20oC..

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 dilution of 1:1K of antiserum and 1-2 ug/ml for IgG is recommended for Western.

ELISA (1:10-50K; using 50-100 ng control peptide/well).

Histochemistry & Immunofluorescence: not tested. An initial concn of 5-10 ug/ml IgG is recommended for IHC.

Specificity & Cross-reactivity

The mOGG13-P peptide sequence has 83% homology with rat OGG1 (1). No significant sequence homology exist with hOGG1. We recommend the use of anti-human OGG1 (hOGG11-S or hOGG12-S) for detecting hOGG1. Antibody crossreactivity in various species is not known. Control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity (see detailed protocol at: www.4adi.com/data/abblock.html).

General References: (1) Yoshinari T et al (1997) Gene Accession # U88621; Aburatani H et al (1997) gene accession # U88620; Radicella JP et al (1997) PNAS 94, 8010-8015; Rosenquist TA et al (1997) PNAS 94, 7429-7434; (2) Kuo FC et al (1997) J Exp Med. (in press); (3) Tani M et al (1997) gene accession # AF012912; Prieto-Alamo MJ et al (1997) gene accession # AF029690.

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

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mOGG13-S-A-P-C 70308A