PRODUCT INFORMATION

Expression system E.coli

Domain 1-345aa

UniProt No. 008760

NCBI Accession No. NP_035087

Alternative Names

N-glycosylase/DNA lyase, Mmh, 8-oxoguanine DNA-glycosylase 1, DNA-apurinic or apyrimidinic site lyase, AP lyase

PRODUCT SPECIFICATION

Molecular Weight

41.3 kDa (368aa) Confirmed by MALDI-TOF

Concentration

0.25mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 30% glycerol

Purity > 90% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Ogg1, also known as N-glycosylase/DNA lyase, is a DNA glycosylase enzyme involved in base excision repair. This protein is the primary enzyme responsible for the excision of 7, 8-dihydro-8-oxoguanine (8-oxoG), a mutagenic base byproduct which occurs as a result of exposure to reactive oxygen species (ROS). It has a beta lyase activity that nicks DNA 3 to the lesion. Recombinant mouse Ogg1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography



Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MGSMLFRSWL PSSMRHRTLS SSPALWASIP CPRSELRLDL VLASGQSFRW KEQSPAHWSG VLADQVWTLT QTEDQLYCTV YRGDDSQVSR PTLEELETLH KYFQLDVSLA QLYSHWASVD SHFQRVAQKF QGVRLLRQDP TECLFSFICS SNNNIARITG MVERLCQAFG PRLIQLDDVT YHGFPNLHAL AGPEAETHLR KLGLGYRARY VRASAKAILE EQGGPAWLQQ LRVAPYEEAH KALCTLPGVG AKVADCICLM ALDKPQAVPV DVHVWQIAHR DYGWHPKTSQ AKGPSPLANK ELGNFFRNLW GPYAGWAQAV LFSADLRQPS LSREPPAKRK KGSKRPEG

General References

Seeberg E., et al. (2002). Nucleic Acids Res. 30(11):2349-57. Hodges NJ., et al (2010). DNA Repair (Amst). 9(2):144-52.

DATA



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)