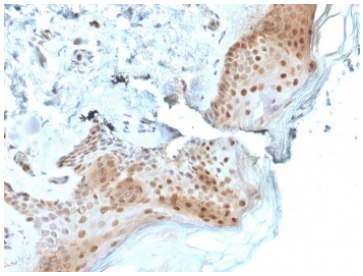
OGG1 Antibody / 8-Oxoguanine DNA Glycosylase [clone CPTC-OGG1-1] (V7991)

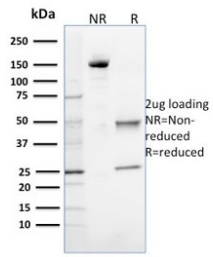
Catalog No.	Formulation	Size
V7991-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7991-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7991SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2c, kappa
Clone Name	CPTC-OGG1-1
Purity	Protein G affinity chromatography
UniProt	O15527
Localization	Nuclear, cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This OGG1 antibody is available for research use only.



IHC staining of FFPE human skin with OGG1 antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free OGG1 antibody as confirmation of integrity and purity.

Description

8-oxoguanine (8-oxoG), an oxidized form of guanine, is produced by reactive oxygen species in both DNA and nucleotide pools during normal aging. Accumulation of 8-oxoG increases the occurrence of A:T to C:G or G:C to T:A transversionmutations, because 8-oxoG forms a stable basepair with adenine as well as with cytosine. OGG1 (for 8-oxoG DNA glycosylase), also designated MMH, is a DNA repair enzyme that corrects these mutations. Inactivation of the OGG1 gene leads to a mutator phenotype, characterized by the increase in G:C to T:A transversions. The OGG1 gene encodes eight isoforms (OGG1A-C, OGG2A-E) which result from alternative splicing of a single messenger RNA. The OGG1A splice variant is the most prevalent form and localizes to the nucleus, whereas the OGG2A splice variant is targeted to the mitochondria. Guanine is the main target for reactive oxygen species in DNA, and 8-oxoguanine is the most frequent base lesion. Therefore, formation of 8-oxoguanine is an important biomarker of oxidative damage to DNA. It is primarily repaired by the DNA glycosylase OGG1. Furthermore, defects in OGG1 may be a cause of renal cell carcinoma.

Application Notes

Optimal dilution of the OGG1 antibody should be determined by the researcher.

Immunogen

A recombinant full-length human protein was used as the immunogen for this OGG1 antibody.

Storage

Store the OGG1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

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