

Product datasheet

Anti-8-Hydroxy-2'-deoxyguanosine antibody [N45.1] ab48508

★★★★★ [9 Abreviews](#) [125 References](#) [3 Images](#)

Overview

Product name	Anti-8-Hydroxy-2'-deoxyguanosine antibody [N45.1]
Description	Mouse monoclonal [N45.1] to 8-Hydroxy-2'-deoxyguanosine
Host species	Mouse
Specificity	Nineteen analogues of 8-Hydroxy-2'-deoxyguanosine {guanosine (G), 7-methyl-G, 6-SH-G, 8-bromo-G, dA, dC, dT, dI, dU, dG, O6-methyl-dG, 8-OHdA, guanine (Gua), O6-methyl-Gua, 8-OHGua, uric acid, Urea, creatine, creatinine} demonstrate no cross-reactivity. Only 8-sulfhydryl-G and 8-OHG demonstrate minimal cross-reactivity (less than 1%).
Tested applications	Suitable for: IHC-P
Species reactivity	Reacts with: Species independent
Immunogen	Chemical/ Small Molecule: 8-Hydroxy-2'-deoxyguanosine conjugated Keyhole Limpet Hemocyanin
Positive control	Epidermis from hairless mouse treated for 4 weeks with chronic UVB irradiation, or kidney treated with Fe-NTA.
General notes	<p>This product was changed from ascites to tissue culture supernatant on 27th February 2018.</p> <p>Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	Constituent: 0.41% PBS

Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	N45.1
Isotype	IgG1
Light chain type	kappa

Applications

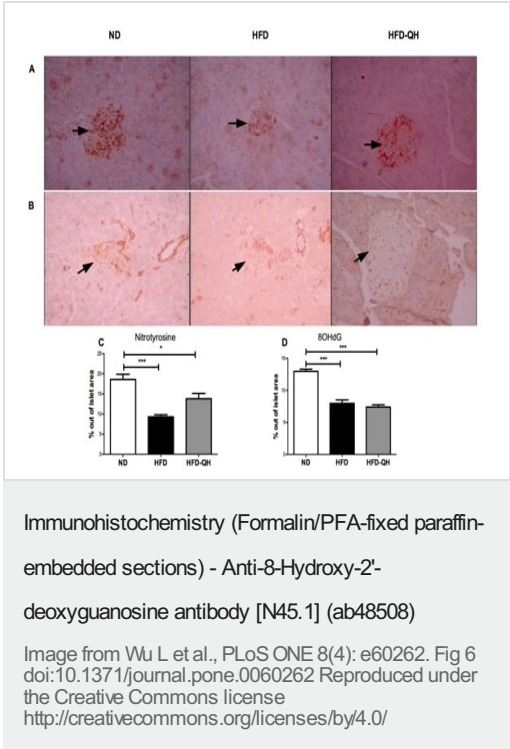
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab48508 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★★ (3)	Use a concentration of 5 - 10 µg/ml. Perform heat mediated antigen retrieval via the microwave method before commencing with IHC staining protocol. For mouse on mouse staining we recommend using MOM kit - <u>ab127055</u> .

Target

Relevance 8-hydroxy-2'-deoxyguanosine is a biomarker of oxidative DNA damage.

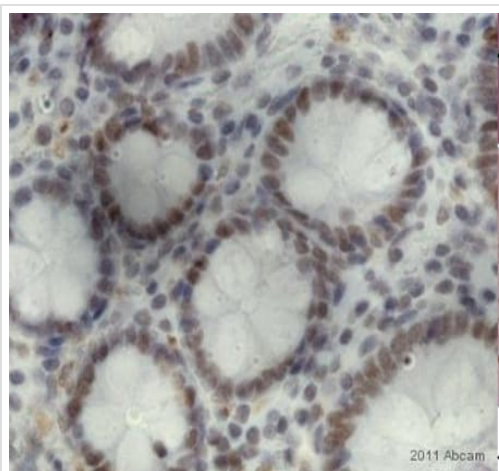
Images



De-paraffinized and dehydrated sections were treated in a microwave oven at low power for 10 min in 0.01 M sodium citrate buffer (pH 6.0) to retrieve antigen, and inactivated endogenous peroxidase using 3% hydrogen peroxide in methanol for 10 min, and blocked with blocking solution for 1 hour at room temperature. Sections were then incubated with 1∶20 dilution of mouse monoclonal antibody to 8-Hydroxy-2'-deoxyguanosine (ab48508) overnight at 4°C. For detection, a biotinylated anti-mouse and HRP-labeled Streptavidin, and staining with DAB was used.

Immunohistochemical staining of nitrotyrosine (A) and 8-hydroxy-2'-deoxyguanosine (B) was performed on 5 rats randomly chosen from each group (ND: chow diet group, HFD: High fat diet, HFD-QH: High fat diet treated with Qing Huo Yi Hao" (QHYH)). An islet is encircled in each quadrant. Black arrows point to islets of Langerhans (Original magnification ×200). Percentage of immunohistochemical positive staining area in islet out of the area of corresponding islet (C, D) was presented. Values and bars represent means±SEM. * and ** denote *P*<0.05 and *P*<0.001

versus group ND.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-8-Hydroxy-2'-deoxyguanosine antibody [N45.1] (ab48508)

This image is courtesy of an Abreview submitted by Rudolf Jung

ab48508 staining 8-Hydroxy-2'-deoxyguanosine in human colon tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a TE buffer. Samples were incubated with primary antibody (1/50) for 30 mins at 20°C. A HRP-conjugated Goat anti-mouse IgG was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-8-Hydroxy-2'-deoxyguanosine antibody [N45.1] (ab48508)

Ab48508, at a concentration of 5 µg/ml, staining 8-Hydroxy-2'-deoxyguanosine in epidermis from hairless mouse after 4 weeks of treatment by chronic UVB irradiation.

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