

8-OHdG monoclonal antibody, clone OHdG F5

Catalog # MAB6116 Size 20 ug

Specification	
Product Description	Mouse monoclonal antibody raised against 8-Hydroxy-2'-deoxyguanosine (8-OHdG).
Immunogen	8-OHdG conjugated with KLH.
Host	Mouse
Specificity	Among the 19 analogues of 8-OHdG (guanosine (G), 7-methyl-G, 6-SH-G, 8-bromo-G, dA, dC, dT, dI, dU, dG, O ⁶ -methyl-dG, 8-OHdA, guanine (Gua), O ⁶ -methyl-Gua, 8-OHGua, uric acid, Urea, creatine, creatinine) demonstrate no cross-reactivity. Only 8-sulfhdryl-G and 8-OHG demonstrate minimal cross-reactivity (less than 1%).
Form	Lyophilized
Isotype	lgG1, kappa
Recommend Usage	Immunohistochemistry (5 -10 ug/mL lgG) The optimal working dilution should be determined by the end user.
Storage Buffer	Lyophilized from 50 mM PBS, pH 7.4 (1.0% BSA).
Storage Instruction	Store at less than -20°C on dry atmosphere. After reconstitution with distilled water, store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

Immunohistochemistry

Publication Reference



 Asymmetrical arginine dimethylation of histone H4 by 8-oxog/OGG1/PRMT1 is essential for oxidative stressinduced transcription activation.

Wentao Wang, Ying Ma, Miaoling Huang, Weichu Liang, Xingqi Zhao, Qianwen Li, Shiwei Wang, Zhigang Hu, Lingfeng He, Tao Gao, Jinfei Chen, Feiyan Pan, Zhigang Guo.

Free Radical Biology & Medicine 2021 Feb; 164:175.

Application: IF, Human, HeLa cells

• SUMO2 regulates vascular endothelial function and oxidative stress in mice.

Kim YR, Jacobs JS, Li Q, Gaddam RR, Vikram A, Liu J, Kassan M, Irani K, Kumar S.

American Journal of Physiology. Heart and Circulatory Physiology 2019 Dec; 317(6):H1292.

Application: IF, Mouse, Aortas

• Protection against pyrimidine dimers, p53, and 8-hydroxy-2'-deoxyguanosine expression in ultravioletirradiated human skin by sunscreens: difference between UVB + UVA and UVB alone sunscreens.

Liardet S, Scaletta C, Panizzon R, Hohlfeld P, Laurent-Applegate L.

The Journal of Investigative Dermatology 2001 Dec; 117(6):1437.

Application: IHC-P, Human, Human skin

• Formation of 8-hydroxy-2'-deoxyguanosine and 4-hydroxy-2-nonenal-modified proteins in rat liver after ischemia-reperfusion: distinct localization of the two oxidatively modified products.

Yamagami K, Yamamoto Y, Kume M, Ishikawa Y, Yamaoka Y, Hiai H, Toyokuni S.

Antioxidants & Redox Signaling 2000 Mar; 2(1):127.

Application: IHC-P, Rat, Rat liver

Age and organ dependent spontaneous generation of nuclear 8-hydroxydeoxyguanosine in male Fischer 344
rats.

Nakae D, Akai H, Kishida H, Kusuoka O, Tsutsumi M, Konishi Y.

Laboratory Investigation; A Journal of Technical Methods and Pathology 2000 Feb; 80(2):249.

Intranuclear distribution of 8-hydroxy-2'-deoxyguanosine. An immunocytochemical study.

Toyokuni S, Iwasa Y, Kondo S, Tanaka T, Ochi H, Hiai H.

The Journal of Histochemistry and Cytochemistry: Official Journal of the Histochemistry Society 1999 Jun; 47(6):833.

Application: IF, Rat, Rat kidney, testis

Hyperglycemia causes oxidative stress in pancreatic beta-cells of GK rats, a model of type 2 diabetes.

lhara Y, Toyokuni S, Uchida K, Odaka H, Tanaka T, Ikeda H, Hiai H, Seino Y, Yamada Y.

Diabetes 1999 Apr; 48(4):927.

Application: IHC-P, Rat, Rat pancreas