Antibodies

Data Sheet

DIBROMO-TYROSINE (DiBrY)

ANTIBODY, MONOCLONAL

Catalog no.: AA1014.1

Immunogen: 3, 5-dibromo-tyrosine KLH-conjugated

Host: Mouse Balb/c

Clone no.: 3A5

Isotype: $IgG_{1\ kappa}$

Matrix: Protein A purified, 10 mM PBS pH 7.4

Specificity: Specific for di-halogenated tyrosine. Recognizes dibromo-tyrosine (DiBrY), N-acetylated dichloro-tyrosine (NAcDiClY), diiodo-tyrosine (DiIY), N-bromo-succinimide-treated BSA, HOCl-treated BSA and dibromo-tyrosine conjugated BSA. Bromotyrosine (BrY) is weakly recognized.

There was no cross reactivity obtained with dityrosine-conjugated BSA, peroxynitrite-treated BSA, tyrosine (Y), chlorotyrosine(ClY), 3-3'-dityrosine (DiY), 3-aminotyrosine (NH_2Y), 3-nitrotyrosine (NO_2Y), phenylalanine (Phe), o-phosphotyrosine, 3, 4-dihydroxyphenylacetic acid (DOPA) and 2-hydroxy-4-phenylacetic acid. No cross reactivity was obtained with brominated nucleic acids 5-bromouracil, 5-bromouridine, and 8-bromoguanosine.

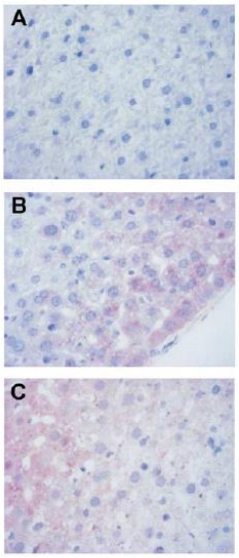

Figure 1: Immunohistochemistry image of Dibromo-tyrosine staining in paraffin sections of LPS-treated mouse liver. Antigen retrieval was performed by microwave treatment in 0.01 M citrate buffer (pH 6.0) for 5 min. The sections were incubated with AA1014 (10 µg/ml) and detected using biotinylated secondary antibody and Vectastain ABC-AP kit (Vector Laboratories). Vector Red substrate served as chromogen (Vector Laboratories). Sections were counterstained with hematoxylin. **A.** Liver section of untreated mouse; **B.** liver section of LPS-treated mouse sacrificed after 24 h; **C.** liver section of LPS-treated mouse sacrificed after 72 h.

Kato Y et al. (2005) Free Radical Biology & Medicine38:24–31

Contents: 20 µg (lyophilized)

Resuspend in 200 µl aqua bidest. for 100 µg/ml of IgG

Known applications: ELISA[1], Western Blot, immunohistochemistry (paraffin sections, 10 µg/ml)[1]

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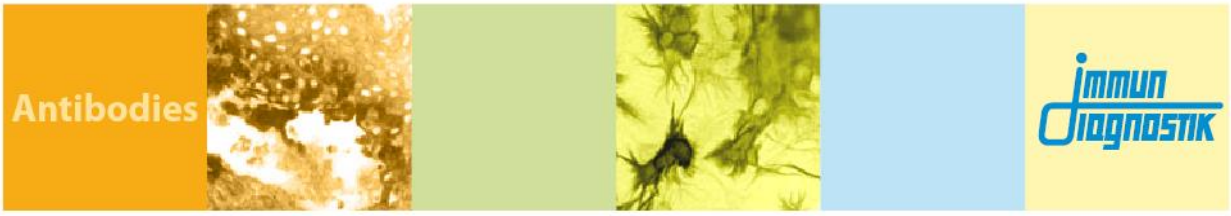

This antibody has not been tested for use in all applications. This does not necessarily exclude its use in non-tested procedures. The stated dilutions are recommendations only. End users should determine optimal dilutions in their system using appropriate negative/positive controls.

Store at: - 20 °C

Repeated thawing and freezing must be avoided

References:

1. Kato Y, Kawai Y, Morinaga H, Kondo H, Dozaki N, Kitamoto N, Osawa T. (2005). Immunogenicity of a brominated protein and successive establishment of a monoclonal antibody to dihalogenated tyrosine. *Free Radic Biol Med* **38**(1): 24-31

2. Wu W, Chen Y, d'Avignon A, Hazen SL. (1999). 3-Bromotyrosine and 3,5-dibromotyrosine are major products of protein oxidation by eosinophil peroxidase: potential markers for eosinophildependent tissue injury in vivo. *Biochemistry* **38**(12):3538-48

Last updated on: 11 November 2021

For research use only

Publishing research using AA1014? Please let us know so that we can cite your publication as a reference.

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