Anti-Malondialdehyde antibody ab6463

Overview

**Product name**
Anti-Malondialdehyde antibody

**Description**
Rabbit polyclonal to Malondialdehyde

**Host species**
Rabbit

**Tested applications**
Suitable for: WB, IHC-Fr, ELISA, IHC-P

**Species reactivity**
Reacts with: Species independent

**Immunogen**
Chemical/ Small Molecule: Synthetic Malondialdehyde conjugated to bovine serum albumin (BSA) (available as ab126288).

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**
Constituents: 50% Glycerol, 50% Water

**Purity**
Ammonium Sulphate Precipitation

**Clonality**
Polyclonal

**Isotype**
IgG

Applications

Our Abpromise guarantee covers the use of ab6463 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tr>
<td>IHC-Fr</td>
<td>1/1000 - 1/5000. PubMed: 21602916</td>
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<tr>
<td>ELISA</td>
<td>Use at an assay dependent concentration.</td>
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<tr>
<td>IHC-P</td>
<td>1/1000 - 1/5000.</td>
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Malondialdehyde (MDA) is a natural product formed in all mammalian cells as a product of lipid peroxidation. MDA is a highly reactive three carbon dialdehyde produced as a byproduct of polyunsaturated fatty acid peroxidation and arachidonic acid metabolism. MDA readily combines with several functional groups on molecules including proteins, lipoproteins, and DNA. It reacts with DNA to form adducts to deoxyguanosine and deoxyadenosine. The major adduct to DNA is a pyrimidopurinone called M1G which appears to be a major endogenous DNA adduct in human beings that may contribute significantly to cancer linked to lifestyle and dietary factors. MDA modified proteins may show altered physico chemical behavior and antigenicity. MDA is toxic and has been implicated in aging mutagenesis, carcinogenesis, diabetic nephropathy and radiation damage. Increased expression of MDA has been reported in the brains of Alzheimer's patients. Antibodies to MDA will help to visualize the MDA adducts.

Images

ab6463 staining Malondialdehyde in human rectal cancer tissue by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections).

Tissue was fixed with formaldehyde and a heat mediated antigen retrieval step was performed using citrate buffer pH 6.0. Samples were then permeabilized, blocked using 5% serum for 1 hour at 4°C then incubated with ab6463 at a 1/500 dilution for 24 hours at 4°C. The secondary used was a biotin conjugated goat anti-rabbit polyclonal, used at a 1/500 dilution.
Immunohistochemical analysis of rat hippocampus tissue, sub-regions CA1, CA3 and DG, staining Malondialdehyde with ab6463. Rats were treated with saline (control) or multiple doses of methamphetamine.

Sections were fixed in paraformaldehyde and blocked with 10% normal horse serum for 2 hours at room temperature. Samples were incubated with primary antibody (1/200) overnight at 4°C. Staining was detected using DAB.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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