Product datasheet

Anti-Aflatoxin B1 antibody [AFA-1] ab1017

Overview

Product name: Anti-Aflatoxin B1 antibody [AFA-1]
Description: Mouse monoclonal [AFA-1] to Aflatoxin B1
Host species: Mouse
Tested applications: Suitable for: ELISA
Species reactivity: Reacts with: Species independent
Immunogen: Purified Aflatoxin B1
General notes: This product was changed from ascites to tissue culture supernatant on 5th December 2019. Lot numbers higher than GR285242 are from tissue culture supernatant. 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.

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: pH: 7.20
Purity: Tissue culture supernatant
Clonality: Monoclonal
Clone number: AFA-1
Isotype: IgG2a

Applications

Our Abpromise guarantee covers the use of ab1017 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>Abreviews</th>
<th>Notes</th>
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<td>ELISA</td>
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<td>Use at an assay dependent concentration.</td>
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Relevance

The aflatoxins are a group of closely related mycotoxins that are widely distributed in nature. The most important of the group is aflatoxin B1 (AFB1), which has a range of biological activities, including acute toxicity, teratogenicity, mutagenicity and carcinogenicity. In order for AFB1 to exert its effects, it must be converted to its reactive epoxide by the action of the mixed function mono-oxygenase enzyme systems (cytochrome P450-dependent) in the tissues (in particular, the liver) of the affected animal. This epoxide is highly reactive and can form derivatives with several cellular macromolecules, including DNA, RNA and protein. Cytochrome P450 enzymes may additionally catalyse the hydroxylation (to AFQ1 and AFM1) and demethylation (to AFP1) of the parent AFB1 molecule, resulting in products less toxic than AFB1. Conjugation of AFB1 to glutathione (mediated by glutathione S-transferase) and its subsequent excretion is regarded as an important detoxification pathway in animals. Aflatoxins are well recognized as a cause of liver cancer, but they have additional important toxic effects. Aflatoxin B1 is a potent hepatocarcinogenic and mutagenic mycotoxin of Aspergillus flavus.

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