Product datasheet

anti-Aflatoxin B1 and B2 mouse monoclonal, AFT14 (CBL03), purified

Short overview

Cat. No.	691534
Quantity	1 ml (100 µg/ml)
Concentration	100 µg/ml

Product description

Host	Mouse
Antibody Type	Monoclonal
Isotype	IgG2a kappa
Clone	AFT14 (CBL03)
Immunogen	Aflatoxin obtained from Aspergillus
Formulation	PBS with 0.02% sodium azide
Conjugate	Unconjugated
Purification	Affinity chromatography
Storage	2-8°C
Intended use	Research use only
Application	ELISA, WB
Reactivity	Aspergillus

Applications

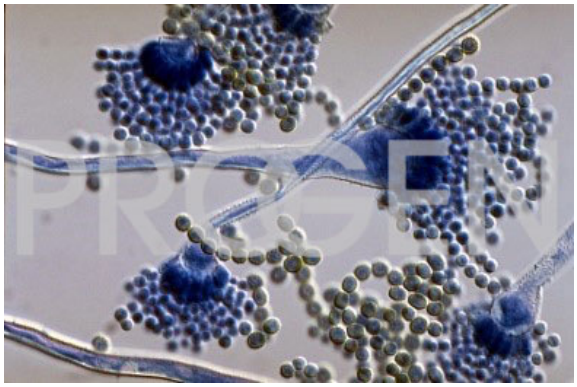
ELISA	Assay dependent
Western Blot (WB)	1:1-1:2 (50-100 µg/ml)

Background

AFT14 reacts with aflatoxin B1 and B2, a 55 kDa protein secreted by Aspergillus. 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.

Positive control: aflatoxin B1 and B2 of Aspergillus flavus.

Product images



Aspergillus flavus