

## Mouse Anti-Aflatoxin B1 Monoclonal Antibody

DMABT-Z59171 Mouse(Aflatoxin B1)

Lot. No. (See product label)

### PRODUCT INFORMATION

<b>Product Overview</b>	Mouse Anti-Aflatoxin B1 Monoclonal Antibody
<b>Target</b>	Aflatoxin B1
<b>Immunogen</b>	Purified Aflatoxin B1
<b>Host</b>	Mouse
<b>Isotype</b>	IgG2a
<b>Source</b>	Mouse
<b>Species</b>	N/A
<b>Clone</b>	CHC-3
<b>Purification</b>	Protein G purified
<b>conjugation</b>	N/A
<b>Applications</b>	ELISA
<b>Domain</b>	ELISA: Use a concentration of 6µg/ml.

### PACKAGING

<b>Format</b>	Liquid
<b>Buffer</b>	PBS, pH7.2
<b>Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>Size</b>	250µg

### BACKGROUND

**Introduction** 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.

**Keywords** AFB1; AFB1-AR1; Aldoketoreductase 7; Aflatoxin