

# Aspergillus fumigatus IgM ELISA kit ab247191

1 Image

### Overview

**Product name** Aspergillus fumigatus IgM ELISA kit

**Detection method** Colorimetric

**Precision**

Intra-assay

Sample	n	Mean	SD	CV%
sample	24	0.436nM		2.65%
sample	24	0.645nM		3.63%
sample	24	1.203nM		1.83%

Inter-assay

Sample	n	Mean	SD	CV%
sample	12	15.41nM		5.76%
sample	12	31.75nM		6.61%
sample	12	6.61nM		6.19%

**Sample type** Serum, Hep Plasma, Cit plasma

**Assay type** Sandwich (qualitative)

**Assay duration** Multiple steps standard assay

**Species reactivity** **Reacts with:** Human

**Product overview** *Aspergillus fumigatus* IgM ELISA kit (ab247191) is designed for the qualitative determination of IgM class antibodies against *Aspergillus fumigatus* in human serum or plasma (citrate, heparin).

The qualitative immunoenzymatic determination of specific antibodies is based on the ELISA (Enzyme-linked Immunosorbent Assay) technique. Microplates are coated with specific antigens to bind corresponding antibodies of the sample. After washing the wells to remove all unbound sample material a horseradish peroxidase (HRP) labelled conjugate is added. This conjugate binds to the captured antibodies. In a second washing step unbound conjugate is removed. The immune complex formed by the bound conjugate is visualized by adding Tetramethylbenzidine

(TMB) substrate which gives a blue reaction product. The intensity of this product is proportional to the amount of specific antibodies in the sample. Sulphuric acid is added to stop the reaction. This produces a yellow endpoint colour. Absorbance at 450/620 nm is read using an ELISA microwell plate reader.

*Aspergillus fumigatus* is a fungus of the genus *Aspergillus* and is one of the most common *Aspergillus* species to cause disease in individuals with an immunodeficiency. *A. fumigatus*, a saprotroph, is widespread in nature and is typically found in soil and decaying organic matter. Colonies of the fungus produce thousands of small conidia (2-3 µm) that readily become airborne. The fungus is capable of growth at temperatures up to 50 °C, with conidia surviving at 70 °C. Humans are continuously in contact with these asexual spores and it is estimated that an individual inhales several hundred conidia each day; typically, these are quickly eliminated by the immune system. Aspergillosis develops mainly in individuals who are immunocompromised, either from disease or from immunosuppressive drugs, and is a leading cause of death in acute leukemia and hematopoietic stem cell transplantation.

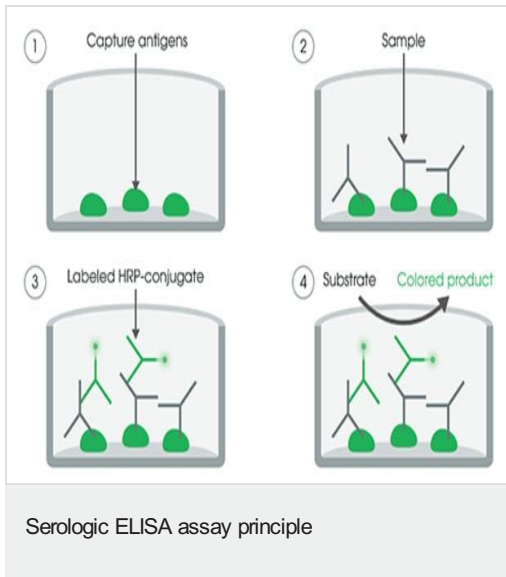
**Platform** Pre-coated microplate (12 x 8 well strips)

## Properties

**Storage instructions** Store at +4°C. Please refer to protocols.

Components	Identifier	1 x 96 tests
20X Washing Solution	White cap	1 x 50ml
anti-human IgM HRP conjugate		1 x 20ml
Aspergillus fumigatus Coated Microplate (IgM)		1 unit
Cover Foil		1 unit
IgM Cut-off Control		1 x 3ml
IgM Negative Control		1 x 2ml
IgM Positive Control		1 x 2ml
IgM Sample Diluent		1 x 100ml
Stop Solution	red cap	1 x 15ml
TMB Substrate Solution	Yellow cap	1 x 15ml

## Images



Specific antigens are coated on the 96-well plate, controls or test samples are added to the well and incubated. The wells are washed to remove any unbound Human anti-antigen antibodies (Ig). A horseradish peroxidase (HRP) labelled anti-Human Ig conjugate is added to the wells. TMB is then catalyzed by the HRP to produce a blue color product that changes to yellow after adding an acidic stop solution. The intensity of yellow coloration is directly proportional to the amount of Human anti-antigen Ig captured on the plate.

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

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