

Product datasheet

Human MICA ELISA Kit ab59569

1 Image

Overview

**Product name** Human MICA ELISA Kit

**Detection method** Colorimetric

**Precision**

Intra-assay

| Sample | n | Mean        | SD   | CV%  |
|--------|---|-------------|------|------|
| A      | 6 | 2214.6pg/ml | 50.3 | 2.3% |
| B      | 6 | 1102.1pg/ml | 39.5 | 3.6% |
| C      | 6 | 641.6pg/ml  | 47.7 | 7.4% |

Inter-assay

| Sample | n  | Mean      | SD    | CV%  |
|--------|----|-----------|-------|------|
| A      | 18 | 2416pg/ml | 187.1 | 7.7% |
| B      | 16 | 1200pg/ml | 105.2 | 8.8% |
| C      | 18 | 627pg/ml  | 50.9  | 8.1% |

**Sample type** Cell culture supernatant, Cell culture extracts

**Assay type** Sandwich (quantitative)

**Sensitivity** = 123 pg/ml

**Range** 156 pg/ml - 5000 pg/ml

**Assay time** 3h 50m

**Assay duration** Multiple steps standard assay

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

**Product overview**

Abcam's MICA Human *in vitro* ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative determination of MHC class 1 chain-related gene A glycoprotein, in cell culture supernatants and buffered solutions

A monoclonal antibody specific for MICA has been coated onto the wells of the microtiter strips provided. Samples, including standards of known MICA concentrations, control specimens or

unknowns are pipetted into these wells. During the first incubation, the standards or samples and a biotinylated monoclonal antibody specific for MICA are simultaneously incubated. After washing, the enzyme Streptavidin-HRP, that binds the biotinylated antibody is added, incubated and washed. A TMB substrate solution is added which acts on the bound enzyme to induce a colored reaction product. The intensity of this colored product is directly proportional to the concentration of MICA present in the samples.

This kit will recognize both endogenous and recombinant Human MICA.

#### Tested applications

**Suitable for:** Sandwich ELISA

#### Platform

Microplate

#### Properties

#### Storage instructions

Store at +4°C. Please refer to protocols.

| Components                                 | Identifier | 1 x 96 tests | 2 x 96 tests |
|--|------------|--------------|--------------|
| 1X Standard Diluent Buffer                 |            | 1 x 25ml     | 2 x 25ml     |
| 200X Wash Buffer                           | White      | 1 x 10ml     | 2 x 10ml     |
| Biotinylated Antibody Diluent              | Red        | 1 x 7ml      | 1 x 13ml     |
| Biotinylated anti-MICA (MHC Class I alpha) | Red        | 1 x 400µl    | 2 x 400µl    |
| Chromogen TMB Substrate Solution           |            | 1 x 11ml     | 1 x 24ml     |
| HRP Diluent                                | Red        | 1 x 23ml     | 1 x 23ml     |
| MICA Microplate (12 x 8 well strips)       |            | 1 unit       | 2 units      |
| MICA Standard (lyophilized)                | Yellow     | 2 vials      | 4 vials      |
| Stop Reagent                               | Black      | 1 x 11ml     | 2 x 11ml     |
| Streptavidin-HRP                           |            | 2 x 5µl      | 4 x 5µl      |

#### Relevance

The MHC class I chain-related (MIC) proteins are related to the Major histocompatibility complex (MHC) class I proteins which are ubiquitously expressed and mediate the recognition of intracellular antigens by cytotoxic T cells. The MHC class I chain-related (MIC) proteins are recognized by NKG2D, a receptor on NK and T cells, and promote anti-tumor activity. MICA, a member of the MIC family, is widely expressed on many tumors, and it is the MICA/NKG2D interaction that is thought to stimulate the anti-tumor reactivity by T lymphocytes. MICA is present in virtually every tissue except the nervous system, suggesting that MIC protein expression may only be one component of the anti-tumor activity of the immune system.

#### Cellular localization

Plasma membrane

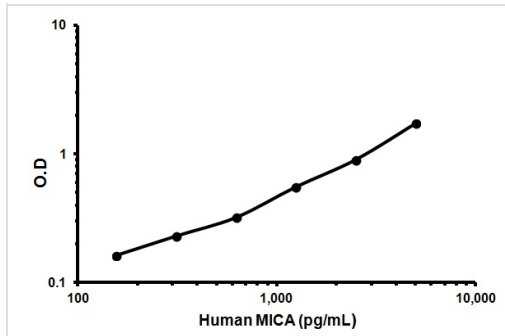
#### Applications

Our [Abpromise guarantee](#) covers the use of **ab59569** in the following tested applications.

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

| Application    | Abreviews | Notes                                    |
|----------------|-----------|--|
| Sandwich ELISA |           | Use at an assay dependent concentration. |

## Images



Typical Standard Curve

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <http://www.abcam.com/abpromise> or contact our technical team.

## Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors