Technical Data Sheet

Biotin Mouse Anti-Human IgE

Product Information

Material Number: 555858
Alternate Name: Immunoglobulin E; IGHE; IGHe; Ig epsilon chain constant region
Size: 0.5 mg
Concentration: 0.5 mg/ml
Clone: G7-26
Isotype: Mouse IgG2a, κ
Reactivity: QC Testing: Human
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The G7-26 monoclonal antibody specifically recognizes the constant region of human Immunoglobulin E (IgE). It does not crossreact with other immunoglobulin heavy chain isotypes. IgE exists in a transmembrane form that is expressed by B lymphocytes and serves as an antigen receptor. Soluble IgE is produced and secreted by activated B cells and plasma cells. IgE may bind through its constant region to cell surface receptors, such as the high-affinity (FcεRI) or low-affinity (FcεRII/CD23) receptors for IgE. FcεRI is expressed on mast cells, basophils, and at lower levels, on dendritic cells and monocytes. FcεRII/CD23 is expressed by B cells and by some other cell types including T cells, monocytes, eosinophils, neutrophils, follicular dendritic cells, and Langerhans cells. Crosslinking of Fc receptor-bound IgE antibodies by multivalent antigens or allergens can induce phagocytosis or the cellular release of inflammatory mediators. Although IgE can provide immune protection against pathogenic parasites, it may also play a central role in a variety of allergic disorders.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with biotin under optimum conditions, and unreacted biotin was removed.

Application Notes

Application

| Application | | |
|-------------|----------|
| ELISA       | Routinely Tested |
| Flow cytometry | Reported |

Recommended Assay Procedure:

For development of a quantitative 2-site ELISA for measuring IgE using anti-Ig reagents from BD Biosciences Pharmingen or from some other vendor, it is important to empirically determine that there is no epitope blocking/steric hindrance. Please call Technical Services for latest information from mAb pairings for these 2-site assays or reference our product information sheet under "ELISA and ELISPOT" at our website: http://www.bdbiosciences.com/us/s/resources.

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
3. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

References