ARG22591
anti-Eosinophil Major Basic Protein antibody [BMK-13]

Summary

Product Description
Mouse Monoclonal antibody [BMK-13] recognizes Eosinophil Major Basic Protein. This antibody recognizes the Eosinophil Major Basic Protein (EMBP), a 117 amino acid protein, corresponding to residues 106-222 of Bone marrow proteoglycan (precursor). Mouse anti Human Eosinophil Major Basic Protein antibody, clone BMK-13 stains both resting and activated eosinophils of bronchial and skin sections of allergic and normal sites and may be considered a Pan eosinophil marker. Mouse anti Human Eosinophil Major Basic Protein antibody, clone BMK-13 cross reacts weakly with basophils which also contain low levels of EMBP. No cross reactivity with other human cells or proteins has been noted.

Tested Reactivity
Hu, Rat

Tested Application
IHC-Fr, IHC-P

Host
Mouse

Clonality
Monoclonal

Clone
BMK-13

Isotype
IgG1

Target Name
Eosinophil Major Basic Protein

Antigen Species
Human

Conjugation
Un-conjugated

Alternate Names
Proteoglycan 2; Bone marrow proteoglycan; MBP1; Pregnancy-associated major basic protein; BMPG; EMBP; MBP

Application Instructions

Application table

<table>
<thead>
<tr>
<th>Application</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHC-Fr</td>
<td>1:20 - 1:50</td>
</tr>
<tr>
<td>IHC-P</td>
<td>1:20 - 1:50</td>
</tr>
</tbody>
</table>

Application Note
IHC-Fr: It is recommended that sections are fixed in a 1:1 mixture of acetone and methanol and air-dried for 1 hour. Good results may be achieved via staining with the APAAP method. IHC-P: This product requires enzymatic pre-treatment of paraffin sections prior to staining. Pepsin is recommended for this purpose. NB. Heat-mediated antigen retrieval methods should not be used.

* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form
Liquid

Purification
Purified

Buffer
PBS, 0.02% Sodium azide and 0.1% BSA

Preservative
0.02% Sodium azide
**Stabilizer** 0.1% BSA

**Concentration** 0.1 mg/ml

**Storage instruction** For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

**Note** For laboratory research only, not for drug, diagnostic or other use.

---

**Bioinformation**

**Gene Symbol** PRG2

**Gene Full Name** proteoglycan 2, bone marrow (natural killer cell activator, eosinophil granule major basic protein)

**Background** The protein encoded by this gene is the predominant constituent of the crystalline core of the eosinophil granule. High levels of the proform of this protein are also present in placenta and pregnancy serum, where it exists as a complex with several other proteins including pregnancy-associated plasma protein A (PAPPA), angiotensinogen (AGT), and C3dg. This protein may be involved in antiparasitic defense mechanisms as a cytotoxin and helminthotoxin, and in immune hypersensitivity reactions. The encoded protein contains a peptide that displays potent antimicrobial activity against Gram-positive bacteria, Gram-negative bacteria, and fungi. It is directly implicated in epithelial cell damage, exfoliation, and bronchospasm in allergic diseases. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2014]

**Function** Cytotoxin and helminthotoxin. Also induces non-cytolytic histamine release from human basophils. Involved in antiparasitic defense mechanisms and immune hypersensitivity reactions. The proform acts as a proteinase inhibitor, reducing the activity of PAPPA. [UniProt]