

Datasheet: MCA5751 BATCH NUMBER 156552

| Description: | MOUSE ANTI HUMAN EOSINOPHIL MAJOR BASIC PROTEIN | | |
|---------------|---|--|--|
| Specificity: | EOSINOPHIL MAJOR BASIC PROTEIN | | |
| Format: | Purified | | |
| Product Type: | Monoclonal Antibody | | |
| Clone: | BMK-13 | | |
| Isotype: | IgG1 | | |
| Quantity: | 0.1 mg | | |
| | | | |

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

| | Yes | No | Not Determined | Suggested Dilution |
|--------------------------------|-----|----|----------------|--------------------|
| Immunohistology - Frozen (1) | • | | | 1/20 - 1/50 |
| Immunohistology - Paraffin (2) | • | | | 1/20 - 1/50 |

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

- (1) 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 <u>APAAP</u> method.
- (2) 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.

| Target Species | Human |
|-----------------------------|---|
| Species Cross Reactivity | Reacts with: Rat Reacts weakly with:Guinea Pig N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. |
| | |

| Product Form | Purified IgG - liquid | | |
|-----------------------------------|--|--|--|
| Buffer Solution | Phosphate buffered saline | | |
| Preservative Stabilisers | 0.02% Sodium Azide (NaN ₃) 0.1% Bovine Serum Albumin | | |
| Approx. Protein Concentrations | IgG concentration 0.1mg/ml | | |
| External Database Links | UniProt: P13727 Related reagents | | |
| | Entrez Gene: <u>5553</u> PRG2 <u>Related reagents</u> | | |
| Synonyms | MBP | | |
| RRID | AB_10671914 | | |
| Specificity | Mouse anti Human Eosinophil Major Basic Protein antibody, c recongises the Eosinophil Major Basic Protein (EMBP), a 117 amir corresponding to residues 106-222 of Bone marrow proteoglycan (| | |

Ione BMK-13

no 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.

References

- 1. Mogbel, R. et al. (1992) Application of monoclonal antibodies against major basic protein (BMK-13) and eosinophil cationic protein (EG1 and EG2) for quantifying eosinophils in bronchial biopsies from atopic asthma. Clin Exp Allergy. 22 (2): 265-73.
- 2. Haczku, A. et al. (1995) T-cells subsets and activation in bronchial mucosa of sensitized Brown-Norway rats after single allergen exposure. <u>Immunology. 85 (4): 591-7.</u>
- 3. Hashimoto, Y. et al. (1993) Purification of the antibacterial fragments of guinea-pig major basic protein. Biochim Biophys Acta. 1203 (2): 236-42.
- 4. Underwood, S. et al. (1995) Time-course of antigen-induced airway inflammation in the guinea-pig and its relationship to airway hyperresponsiveness. Eur Respir J. 8 (12): 2104-13.
- 5. Cameron, L. et al. (2000) Evidence for local eosinophil differentiation within allergic nasal mucosa: inhibition with soluble IL-5 receptor. J Immunol. 164 (3): 1538-45.
- 6. Walsh, G.M. et al. (1999) Resting and cytokine-stimulated human small airway epithelial cells recognize and engulf apoptotic eosinophils. Blood. 94 (8): 2827-35.
- 7. Lacy, P. et al. (1999) Rapid mobilization of intracellularly stored RANTES in response to interferon-gamma in human eosinophils. Blood. 94 (1): 23-32.
- 8. Mishima, H. et al. (1998) CD4+ T cells can induce airway hyperresponsiveness to allergen challenge in the brown norway rat. Am J Respir Crit Care Med. 158 (6): 1863-70.

- 9. Lacy, P. et al. (2003) Divergence of mechanisms regulating respiratory burst in blood and sputum eosinophils and neutrophils from atopic subjects. J Immunol. 170 (5): 2670-9.
- 10. Lacy, P. et al. (1998) Intracellular localization of interleukin-6 in eosinophils from atopic asthmatics and effects of interferon gamma. Blood. 91 (7): 2508-16.
- 11. Tulic, M.K. *et al.* (2009) Thymic indoleamine 2,3-dioxygenase-positive eosinophils in young children: potential role in maturation of the naive immune system. <u>Am J Pathol. 175</u> (5): 2043-52.
- 12. Mahmudi-azer, S. *et al.* (2002) Translocation of the tetraspanin CD63 in association with human eosinophil mediator release. <u>Blood</u>. 99 (11): 4039-47.
- 13. Du, L. *et al.* (2016) Increased Duodenal Eosinophil Degranulation in Patients with Functional Dyspepsia: A Prospective Study. Sci Rep. 6: 34305.
- 14. Vanheel, H. *et al.* (2014) Impaired duodenal mucosal integrity and low-grade inflammation in functional dyspepsia. Gut. 63 (2): 262-71.
- 15. Haczku, A. *et al.* (1995) T-cells subsets and activation in bronchial mucosa of sensitized Brown-Norway rats after single allergen exposure. Immunology. 85 (4): 591-7.
- 16. Wiersma, L.C. *et al.* (2015) Pathogenesis of infection with 2009 pandemic H1N1 influenza virus in isogenic guinea pigs after intranasal or intratracheal inoculation. <u>Am J Pathol. 185 (3): 643-50.</u>
- 17. Tyler, M.A. *et al.* (2017) Large-scale gene expression profiling reveals distinct type 2 inflammatory patterns in chronic rhinosinusitis subtypes. <u>J Allergy Clin Immunol. 139 (3):</u> 1061-1064.e4.
- 18. Wolf, W.A. *et al.* (2015) Predictors of response to steroid therapy for eosinophilic esophagitis and treatment of steroid-refractory patients. <u>Clin Gastroenterol Hepatol. 13 (3):</u> 452-8.
- 19. Al-Rabia, M.W. *et al.* (2004) Membrane receptor-mediated apoptosis and caspase activation in the differentiated EoL-1 eosinophilic cell line. <u>J Leukoc Biol. 75 (6): 1045-55.</u>
- 20. Dellon, E.S. *et al.* (2012) Diagnostic utility of major basic protein, eotaxin-3, and leukotriene enzyme staining in eosinophilic esophagitis. <u>Am J Gastroenterol. 107 (10):</u> 1503-11.
- 21. Isogai S *et al.* (2003) The effects of CD8 $^+\gamma\delta$ T cells on late allergic airway responses and airway inflammation in rats. <u>J Allergy Clin Immunol</u>. 112 (3): 547-55.
- 22. Cirillo, C. *et al.* (2015) Evidence for neuronal and structural changes in submucous ganglia of patients with functional dyspepsia. Am J Gastroenterol. 110 (8): 1205-15.
- 23. Whelan, K.A. *et al.* (2019) Persistent Basal Cell Hyperplasia is Associated with Clinical and Endoscopic Findings in Patients With Histologically Inactive Eosinophilic Esophagitis. Clin Gastroenterol Hepatol. Sep 06 [Epub ahead of print].

Storage

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

Guaranteed until date of expiry. Please see product label.

Health And Safety Information

Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA5751
10041

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) RPE

Goat Anti Mouse IgG IgA IgM (STAR87...) HRP

Goat Anti Mouse IgG (STAR76...) RPE

Goat Anti Mouse IgG (STAR70...) FITC

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

DyLight®650, DyLight®680, DyLight®800,

FITC, HRP

Goat Anti Mouse IgG (STAR77...) HRP

Rabbit Anti Mouse IgG (STAR9...) FITC

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Rabbit Anti Mouse IgG (STAR13...) HRP

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M350426:190307'

Printed on 25 Jul 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint