

**BM116S****Monoclonal Antibody to Proteoglycan 2 - Purified**

<b>Alternate names:</b>	BMPG, Bone marrow proteoglycan, EMBP, Eosinophil granule major basic protein, PRG2, Pregnancy-associated major basic protein
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	0.1 mg/ml
<b>Background:</b>	PRG2 is a cytotoxin and helminthotoxin. It also induces noncytolytic histamine release from human basophils and is involved in antiparasitic defense mechanisms and immune hypersensitivity reactions. The proform acts as a proteinase inhibitor, reducing the activity of PAPPA. In pregnancy serum, the proform exists as a disulfide-linked 2:2 heterotetramer with PAPPA, as a disulfide-linked 2:2 heterotetramer with AGT, and as a complex (probably a 2:2:2 heterohexamer) with AGT and C3dg.
<b>Uniprot ID:</b>	<a href="#">P13727</a>
<b>NCBI:</b>	<a href="#">NP_002719.3</a>
<b>GeneID:</b>	<a href="#">5553</a>
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Recommended Isotype Controls:</b>	SM10P (for use in human samples), AM03095PU-N
<b>Clone:</b>	BMK13
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction <b>Purification:</b> Protein A chromatography <b>Buffer System:</b> PBS with 0.09% sodium azide as preservative and 0.1% BSA as stabilizer.
<b>Applications:</b>	IHC with fresh frozen tissue (fix in methanol:acetone) IHC with formalin fixed paraffin-embedded tissue (treat with 0.1% trypsin before blocking) Western blot ELISA Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	Specific for eosinophil major basic protein irrespective of the stages of eosinophil activation and can be regarded as an eosinophil marker. The antibody will recognize the 23.8 kDa secreted pro-form of MBP (Pregnancy associated MBP) and the 13.8 kDa mature form found in the matrix of the eosinophil large specific granule. <b>Species:</b> Human. Does not cross-react with horse, mouse or rat MBP. Other species not tested.
<b>Storage:</b>	Store the antibody undiluted at 2 - 8°C for one month or at -20 °C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

**Product Citations:****Originator or purchased from resellers:**

1. Hyo S, Kawata R, Kadoyama K, Eguchi N, Kubota T, Takenaka H, et al. Expression of prostaglandin D2 synthase in activated eosinophils in nasal polyps. Arch Otolaryngol Head Neck Surg. 2007 Jul;133(7):693-700. PubMed PMID: 17638783.

**General Readings:**

1. Bernardes JF, Shan J, Tewfik M, Hamid Q, Frenkiel S, Eidelman DH. Protein nitration in chronic sinusitis and nasal polyposis: role of eosinophils. Otolaryngol Head Neck Surg. 2004 Nov;131(5):696-703. PubMed PMID: 15523450.

2. Ying, S., et al., (2002), Methods for identifying human eosinophils in blood and tissue, ACI International, 14:64-71.