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Product datasheet for BM4016

Macrophages (Haematopoiesis associated) Rat Monoclonal Antibody [Clone ID: ER-HR3]

Product data:

Product Type:	Primary Antibodies
Clone Name:	ER-HR3
Applications:	FC, IHC
Recommended Dilution:	**Immunohistochemistry on Frozen Sections:** 2.5 µg/ml (1/400). **Immunohistochemistry on Paraffin Sections:** 25 µg/ml (1/40). Proteinase K pretreatment for antigen retrieval is recommended. *Recommended Positive Control:* Mouse spleen. Has been described to work in**FACS.**
Reactivity:	Mouse
Host:	Rat
Isotype:	IgG2c
Clonality:	Monoclonal
Immunogen:	Adherent bone marrow cells

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Specificity:	Subpopulation of mature Mouse Macrophages. *ER-RH3* recognizes the majority of blood monocytes and a subset of mature resident macrophages, especially those located in hemopoietic organs. *ER-HR3* is a useful marker for the identification and localization of a very distinct mature tissue macrophage subpopulation found in various organs. This marker is especially suitable for ontogenic studies because *ER-HR3* positive macrophages are closely related to hemopietic islands, especially at erythropoietic sites. **Antigen Distribution on Isolated cells and Tissue Sections:** The antigen is found on up to 70% of circulating monocytes; all other leukocytes are *ER-HR3* negative. It is also found on a subpopulation (about 30%) of bone marrow cells, mainly consisting of myeloid cells. In the adult mouse, the antigen is found on distinct subpopulations of resident tissue macrophages in various organs. It is found on a subpopulation of the splenic red pulp macrophages, in the mesenteric lymphoid paracortex, interfollicular areas of Peyer's patches and bone marrow. Epidermal Langerhans cells also express the antigen, whereas macrophages in the connective tissue of the dermis and the gastrointestinal tract only scarcely express the *ER-HR3* related antigen. In the kidney, *ER-HR3* positive macrophages belong to the type 2 interstitial cells in the outer medulla which are negative with BM8. Distinct *ER-HR3* positive macrophage subpopulations are found in various embryological organs where hematopoietic islands occur, and where they are closely associated with erythrocyte precursor cells.
Formulation:	PBS, pH 7.2 State: Purified State: Lyophilized purified IgG fraction Stabilizer: 5 mg/ml BSA Preservative: 0.05% Kathon
Reconstitution Method:	Restore with 0.5 ml distilled water.
Concentration:	1.0 mg/ml (after reconstitution)
Purification:	Affinity Chromatography
Conjugation:	Unconjugated
Storage:	Prior to reconstitution store at 2-8°C. Following reconstitution store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.

Background: Monoclonal antibody ER-HR3 recognizes the majority of blood monocytes and a subset of mature resident macrophages, especially those located in haematopoietic organs. ER-HR3 is a useful marker for the identification and localization of a distinct mature tissue macrophage subpopulation found in various organs. This marker is especially suitable for ontogenic studies because ER-HR3 positive macrophages are closely related to haematopoietic islands, especially at erythropoietic sites.

Synonyms: Macrophage marker

Note: Protocol: **Protocol with frozen, ice-cold acetone-fixed sections:**
The whole procedure is performed at room temperature
1. Wash in PBS
2. Block endogenous peroxidase
3. Wash in PBS
4. Block with 10% normal goat serum in PBS for 30min. in a humid chamber
5. Incubate with primary antibody (dilution see datasheet) for 1h in a humid chamber
6. Wash in PBS
7. Incubate with secondary antibody (peroxidase-conjugated goat anti rat IgG (H+L) minimal-cross reaction to mouse) for 1h in a humid chamber
8. Wash in PBS
9. Incubate with AEC substrate (3-amino-9-ethylcarbazol) for 12min.
10. Wash in PBS
11. Counterstain.

Protocol with formalin-fixed, paraffin-embedded sections:
The whole procedure is performed at room temperature
1. Deparaffinize and rehydrate tissue section
2. Incubate the tissue section with proteinase K for 7 min.
3. Wash in distilled water
4. Block endogenous peroxidase
5. Wash in PBS
6. Block with 10% normal goat serum in PBS for 30min. in a humid chamber
7. Incubate with primary antibody (dilution see datasheet) for 1h in a humid chamber
8. Wash in PBS
9. Incubate with secondary antibody (peroxidase-conjugated goat anti rat IgG (H+L) minimal-cross reaction to mouse) for 1h in a humid chamber
10. Wash in PBS 11. Incubate with AEC substrate (3-amino-9-ethylcarbazol) for 12min.
12. Wash in PBS
13. Counterstain.