

Product datasheet for **BM4045**

CD9 Mouse Monoclonal Antibody [Clone ID: K41]

Product data:

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| Product Type: | Primary Antibodies |
| Clone Name: | K41 |
| Applications: | FC, IHC, WB |
| Recommended Dilution: | Suitable for Immunohistochemistry on: Frozen sections: 2-5 µg/ml, 1/80-1/200). Paraffin sections: 8 µg/ml, 1/50, pretreatment is not necessary. Suggested positive control: human tonsil. Also works in FACS and Western blot. |
| Reactivity: | Canine, Feline, Human, Monkey, Rabbit |
| Host: | Mouse |
| Isotype: | IgG1 |
| Clonality: | Monoclonal |
| Immunogen: | Vero cells |
| Specificity: | Clone K41 detects CD9. Antigen distribution on Isolated cells: CD9 is mainly expressed on platelets, on early B-cells, and monocytes. Further reactivity could be seen with basophiles and eosinophiles. CD9 is used for the characterization of leukaemias and lymphomas. 90% of non-T acute lymphoblastic leukaemic cells, 50% of acute myeloid as well as chronic lymphoid leukaemias express the antigen. Tissue sections: glomeruli, sinus histiocytes, germinal centre, brain white matter, nerves, skin, and vascular smooth muscles. |
| Formulation: | PBS, pH 7.2 with 10 mg/ml BSA as a stabilizer and 0.01% thimerosal as a preservative. State: Purified State: Lyophilized Ig fraction |
| Reconstitution Method: | Restore with 0.5 ml distilled water. |
| Concentration: | 0.4 mg/ml |
| Purification: | Affinity chromatography. |
| Conjugation: | Unconjugated |



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| Storage: | Store the antibody at 2-8°C for one month or (in aliquots) at -20°C for longer. Do not freeze working dilutions. Avoid repeated freezing and thawing. |
| Stability: | Shelf life: One year from despatch. |
| Gene Name: | CD9 molecule |
| Database Link: | Entrez Gene 928 Human P21926 |
| Background: | <p>CD9 is a member of the tetraspan or transmembrane 4 superfamily. The family members (CD9, CD63, CD37, Cd53, CD81, CD82, CD151) show a high degree of homology in their membrane-spanning domain. CD9 is the only member with N-linked sugar bound to the first extracellular segment. Tetraspans are expressed by many cell types and show a different subcellular distribution. CD9 is constitutively surface-expressed by platelets and pre-B cells and is present in the alpha-granules of platelets. The participation of different tetraspan members in signalling complexes on B and T cells have been described. Furthermore, association of CD9 with beta1 integrins has been found. Anti CD9 monoclonal antibodies induce homotypic pre-B cell aggregation and fibronectin receptor-mediated adherence of these cells to bone marrow fibroblasts.</p> <p>Recent observations suggest a role of CD9 in adhesion.</p> |
| Synonyms: | MIC3, TSPAN29, GIG2, p24, Tetraspanin-29, 5H9 antigen |

- 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 mouse IgG+IgM (H+L) minimal-cross reaction to human) 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 with Mayer's hemalum

Protocol with formalin-fixed, paraffin-embedded sections:

- The whole procedure is performed at room temperature
1. Deparaffinize and rehydrate tissue section
 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 mouse IgG+IgM (H+L) minimal-cross reaction to human) 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 with Mayer's hemalum.