Anti– human CD5 Mouse Monoclonal Antibody

Clone: UMAB9 REF RU00028

Intended use

Anti- human CD5 Mouse Monoclonal Antibody is intended for research use only. Not for use in diagnostic procedures. Not for human or animal consumption.

Background

CD5 is a cluster of differentiation found on a subset of IgM-secreting B cells called B-1 cells, and also on T cells. B-1 cells limited diversity of their B-cell receptor due to their lack of the enzyme terminal deoxynucleotidyl transferase (TdT) and are potentially self-reactive. CD5 serves to mitigate activating signals from the BCR so that the B-1 cells can only be activated by very strong stimuli (such as bacterial proteins) and not by normal tissue proteins. CD5 is a good immunohistochemical marker for T-cells. About 76% of T-cell neoplasms are reported to express CD5, and it is also found in chronic lymphocytic leukemia, hairy cell leukaemia, and mantle cell lymphoma cells. It is commonly lost in cutaneous T-cell lymphoma, and its absence can be used as an indicator of malignancy in this condition. The absence of CD5 in T cell acute lymphoblastic leukaemia, while relatively rare, is associated with a poor prognosis.

Alternative names: LEU1, T1

Reagent provided

Anti- human CD5 Mouse Monoclonal Primary Antibody (Clone: UMAB9) is provided in liquid form in 20mM Sodium phosphate, 150mM Sodium chloride, 0.2% BSA, 0.09% Sodium azide, pH 7.4. The isotype of the antibody is IgG1. The total protein concentration is 0.2 ± 0.05 mg/mL.

For Immunohistochemistry the primary antibody may be used at a working dilution of 1:100 – 1:200 for formalin-fixed, paraffin-embedded human tissues, and this can be dependent upon the detection system used. These are guidelines only, and the optimal dilutions should be determined by the individual laboratory.

Immunogen

Full length recombinant protein of human CD5 (NP_055022) was produced in HEK293T cell.

Specificity

The specificity of the anti- human CD5 Mouse Monoclonal Primary Antibody was established on normal human tonsil and muscle. The anti-CD5 presented no staining on formalin fixed human muscle and positive staining on normal human tonsil using immunohistochemical (IHC) test methods.

Precautions

1. This product contains sodium azide (NaN_3), a chemical highly toxic in pure form. At product concentrations, though not classified as hazardous, NaN_3 may react with lead and copper plumbing to form highly explosive build-ups of metal azides. Upon disposal, flush with large volumes of water to prevent metal azide build-up in plumbing.
2. Wear appropriate Personal Protective Equipment to avoid contact with eyes and skin.
3. Unused reagents should be disposed of according to local, State, and Federal regulations.
4. Suitability for specific application may vary and it is the responsibility of the end user to determine the appropriate application for use and stability.

Storage

Store at 2-8°C. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user.

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