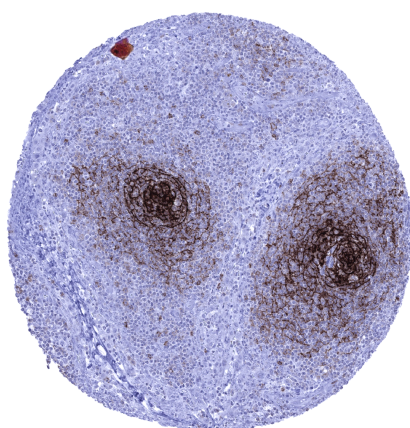


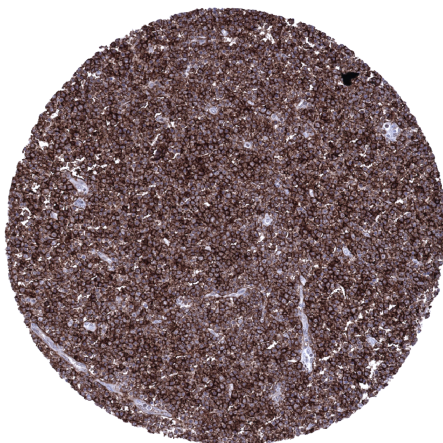
Anti-CD23 Antibody MSVA-023M / Mouse Monoclonal

Human SwissProt	P06734
Human Gene Symbol	FCER2
Synonyms	BLAST-2; C-type lectin domain family 4, member J; Fc fragment of IgE low affinity II receptor; Fc-epsilon-RII; FCER2; FCER2A; FceRII; IgE-binding factor (IGEBF); Immunoglobulin E receptor, low affinity II; Lymphocyte IgE receptor
Specificity	CD23
Immunogen	Recombinant protein of human CD8
Isotype	Mouse / IgG2b
Species Reactivity	Human
Localization	Cell surface

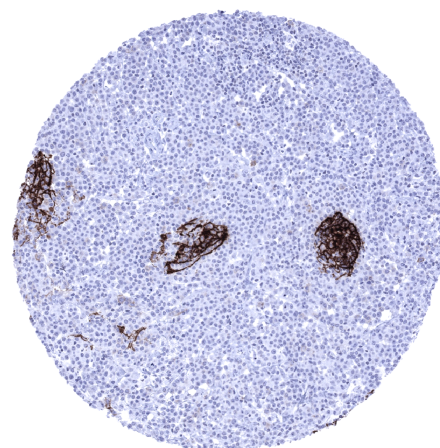
Storage & Stability	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	Purified antibody in Tris pH 7,3-7,7 with 1% BSA, <0,1% NaN ₃ . Also available WITHOUT BSA & azide at 1,0mg/ml.
Positive Control	Tonsil: The follicular dendritic cells of the germinal centres should show a strong CD23 immunostaining while the majority of lymphocytes in the mantle zone of the follicles should show an at least weak staining.
Negative Control	Tonsil: The squamous epithelial cells and T-cells in the interfollicular T-zones should not show any CD23 immunostaining.



Lymph node - In lymph nodes, a strong CD23 immunostaining is seen in follicular dendritic cells of germinal centres while staining is moderate in follicular and perifollicular B-lymphocytes.



B-cell chronic lymphatic leukemia (B-CLL) composed of strongly CD23 positive tumor cells.



CD23 negative mantle cell lymphoma containing few germinal centre remnants that include CD23 positive dendritic cells.

Biology

CD23 is a 45 kDa receptor protein coded by the FCER2 (Fc epsilon receptor II) gene on chromosome 19p. CD23 is found on follicular dendritic cells and on mature B cells. It binds the Fc domain of IgE and several other ligands including CD21. For IgE it acts a "low-affinity" receptor which plays a role in cellular implementation of antibody feedback and regulates IgE synthesis. CD23 is soluble protein which can also be shedded into the blood plasma where it may support the recruitment of non-sensitized B-cells. In normal tissues, CD23 immunostaining is limited to follicular dendritic cells predominately in the apical light zone of the germinal center (strong staining) and mature B-lymphocytes (moderate staining). Among tumors, CD23 is usually expressed in chronic lymphocytic leukemia (85%). CD23 immunostaining can also occur in other B-cell lymphomas such as follicular lymphomas but it is rare in marginal zone (<10%) and lymphoplasmacytic lymphoma and it hardly ever occurs in mantle cell lymphoma (<4%). CD23 expression is also rare in extranodal marginal zone lymphomas such as MALT lymphoma (<10%). In diffuse large B-cell lymphoma CD23 positivity may be associated with good prognosis. CD23 immunostaining is also seen in the rare tumors derived from follicular dendritic cells.

Potential Research Applications

-CD23 is a suitable component of multicolor assays analyzing the role of lymphocyte subsets in cancer and other diseases.

-The prevalence of CD23 expression in hematological and non-hematological neoplasms should be further investigated.

-Some studies have suggested that CD23 may - rarely - be expressed on epithelial tumor cells. The significance of this finding is unknown.

Protocol Suggestions

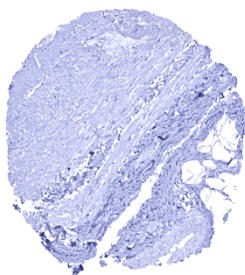
Dilution: 1:150; pH 7,8 is optimal. Freshly cut sections should be used (less than 10 days between cutting and staining deteriorates staining intensity for most antibodies in IHC).

Limitations

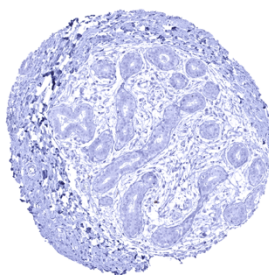
This antibody is available for **research use only** and is not approved for use in diagnostics.

Warranty

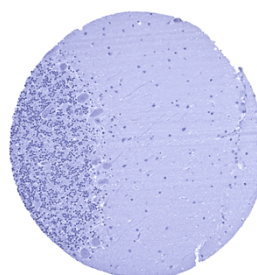
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



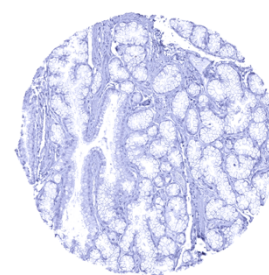
Appendix, muscular wall



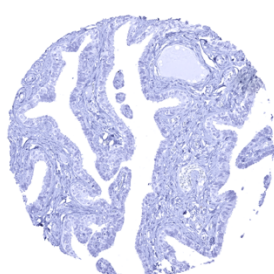
Breast



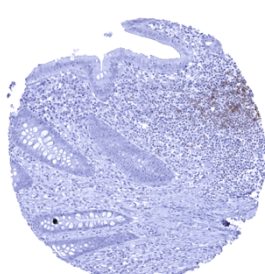
Cerebellum (molecular layer,
Purkinje cell layer, granule cell
layer)



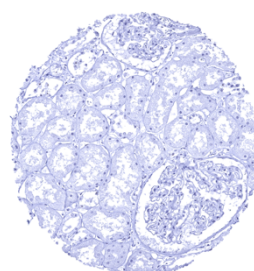
Duodenum, Brunner gland



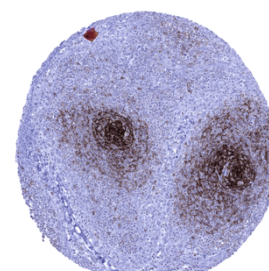
Fallopian tube, mucosa



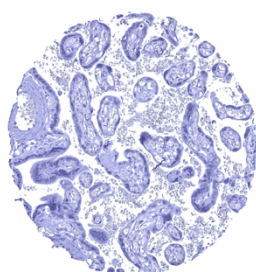
Focal accumulation of CD23 positive
lymphocytes in a lymph follicle



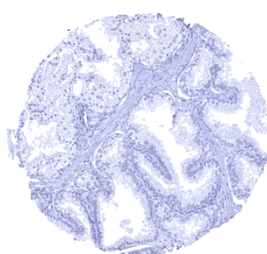
Kidney, cortex



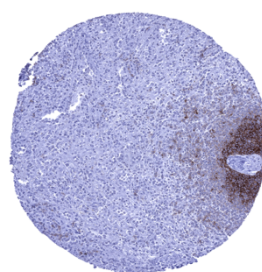
Lymph node - A strong CD23
immunostaining is seen in follicular
dendritic cells of the germinal centre.
CD23 staining is moderate in follicular
and perifollicular B-lymphocytes



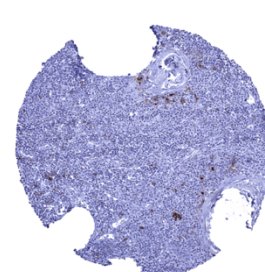
Placenta, mature



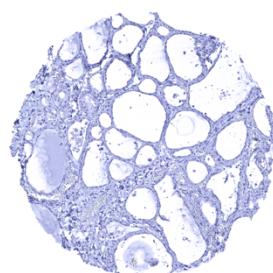
Prostate



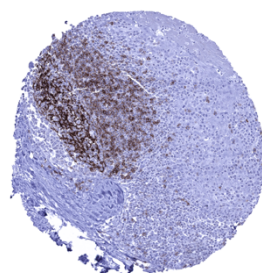
Spleen



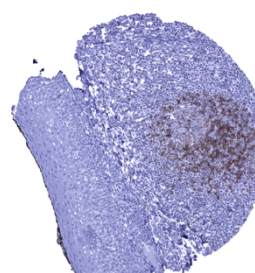
Thymus



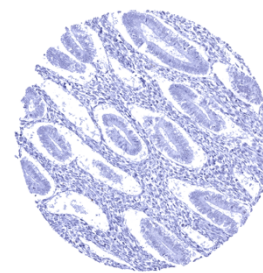
Thyroid gland



Tonsil - Strong CD23
immunostaining in follicular
dendritic cells of the germinal
center and moderate to strong
CD23 positivity in perifollicular B-
lymphocytes



Tonsil, surface epithelium



Uterus, endometrium (secretion)