



MS

Validated Antibodies

MS Validated Antibodies GmbH

Bergstedter Chaussee 62a

22395 Hamburg, Germany

Tel: +49 (0) 40 89 72 55 81

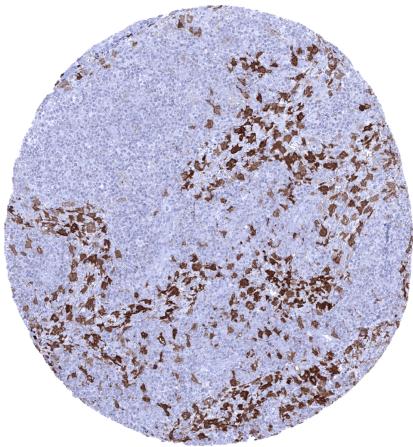
E-Mail:info@ms-validatedantibodies.com

Website: ms-validatedantibodies.com

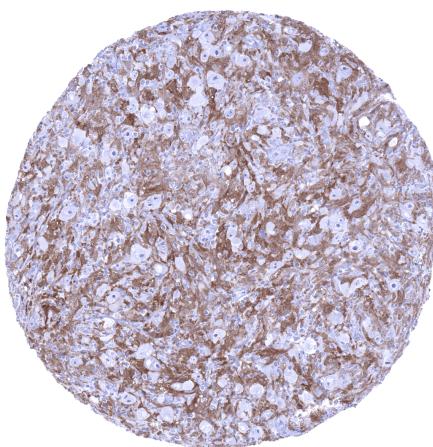
Anti-Factor XIII alpha Antibody MSVA-813R / Recombinant Rabbit monoclonal

Human SwissProt	P00488
Human Gene Symbol	F13A1
Synonyms	Coagulation factor XIII A chain; Coagulation factor XIII A1 polypeptide; F13A; F13a1; Fibrin stabilizing factor, A subunit; Fibrinoligase; FSF, A subunit; Protein-glutamine gamma-glutamyltransferase A chain; TGase; Transglutaminase, plasma
Specificity	Factor 13 alpha
Immunogen	Recombinant fragment of human F13A1 protein
Isotype	Rabbit / IgG
Species Reactivity	Human

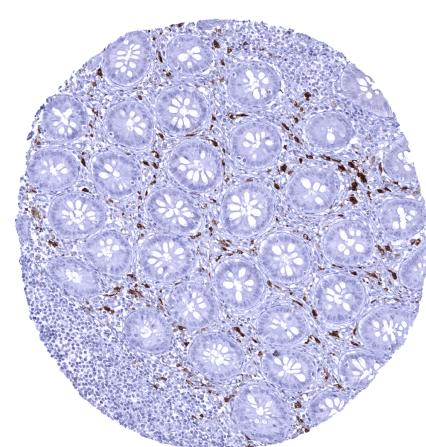
Localization	Cytoplasmic and Secreted
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. A ntibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Positive Control	Colon: A fraction of monocytic cells in the mucosa should show a strong cytoplasmic factor XIIIa immunostaining.
Negative Control	Colon: Factor XIIIa immunostaining should be absent in epithelial, endothelial and smooth muscle cells.



Strong factor XIII immunostaining of sinus histiocytes in a lymph node.



Hodgkin's lymphoma containing a dense population of factor XIIIa positive cells.



A fraction of monocytic cells in appendix mucosa shows a strong cytoplasmic factor XIIIa immunostaining.

Biology

Factor XIIIa is a part of the blood coagulation system. Factor XIII is a transglutaminase that circulates in the human blood as a heterotetramer of two A and two B subunits. Factor XIIIa is a dimer of activated A peptides. In the process of blood coagulation, factor XIIIa has the function to crosslink fibrin. Factor XIIIa bind to the clot via their B units. In the presence of fibrins, thrombin efficiently cleaves a specific peptide bond of each A unit and activates them. Apart from coagulation and thrombosis, Factor XIII also plays a role in wound healing, bone metabolism, pregnancy and tumor biology. In normal tissues, factor XIIIa occurs in monocytes and macrophages of all tissues including dermal dendrocytes, placenta macrophages, megakaryocytes, platelets, chondrocytes, osteoblasts, and osteocytes. Among tumors, factor XIIIa is expressed in tumors of monocytic/histiocytic origin. Factor XIIIa immunostaining is often seen in a fraction of tumor associated macrophages.

Potential Research Applications

-The role of factor XIIIa and of factor XIIIa expressing tumor associated macrophages in cancer biology should be further evaluated.

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. Not for resale without express authorization.

Warranty

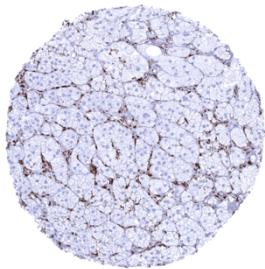
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



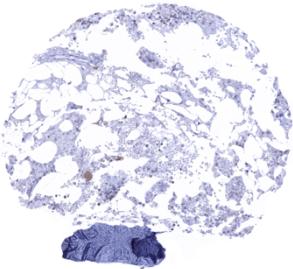
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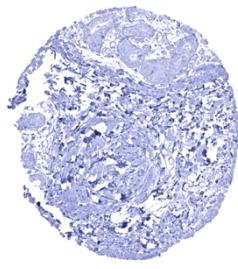
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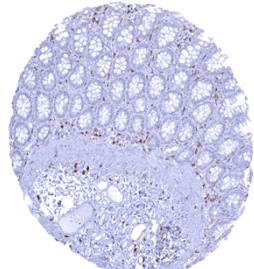
Adrenal gland - Numerous factor XIII positive macrophages are seen in the adrenal gland



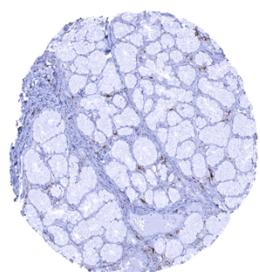
Bone marrow - Few megacaryocytes show moderate factor XIII positivity



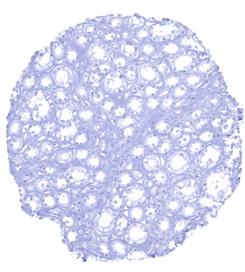
Breast



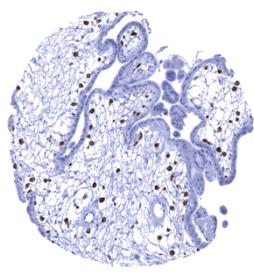
Colon descendens, mucosa - Strong factor XIII immunostaining of mucosa associated macrophages



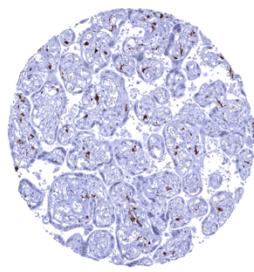
Duodenum, Brunner gland



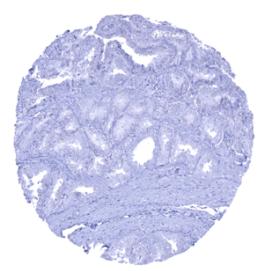
Kidney, medulla



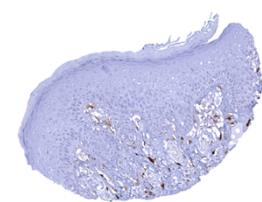
Placenta, early - Macrophages of the placenta show a strong factor XIII immunostaining



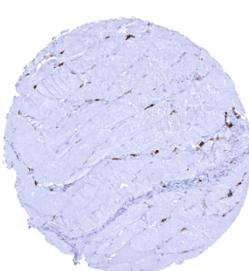
Placenta, mature - Macrophages of the placenta show a strong factor XIII immunostaining



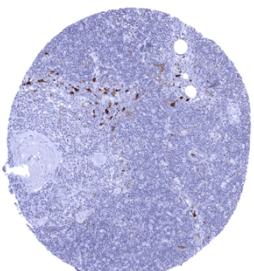
Seminal vesicle



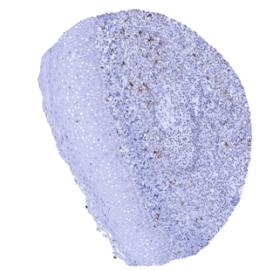
Skin - Moderate to strong factor XIII immunostaining of macrophages in the skin



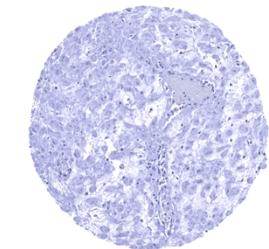
Striated muscle - Strong factor XIII immunostaining of some macrophages



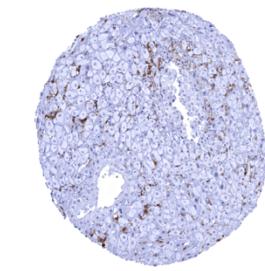
Thymus - Strong factor XIII immunostaining of some macrophages



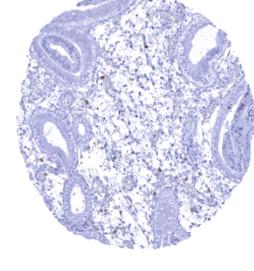
Tonsil, surface epithelium



Uterus, endometrium (pregnancy) - Factor XIII positive macrophages are sparse in this endometrium sample



Uterus, endometrium (pregnancy) - Numerous factor XIII positive macrophages are seen in this endometrium sample



Uterus, endometrium (secretion)