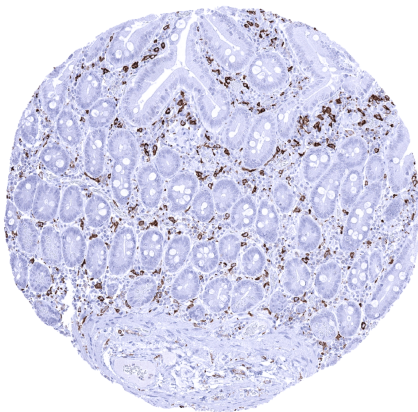


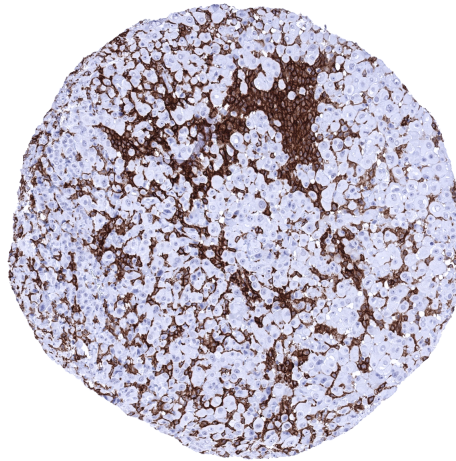
## Anti-AIF1 Antibody MSVA-955M / Mouse monoclonal

Human SwissProt	P55008
Human Gene Symbol	AIF1
Synonyms	Allograft inflammatory factor 1 (AIF1); balloon angioplasty responsive transcription (BART1); IBA1; Interferon responsive transcript 1; Ionized calcium-binding adapter molecule 1; IRT1; Microglia response factor (MRF1)
Specificity	AIF1
Immunogen	Recombinant fragment of human AIF1 protein
Isotype	Mouse / IgG
Species Reactivity	Human

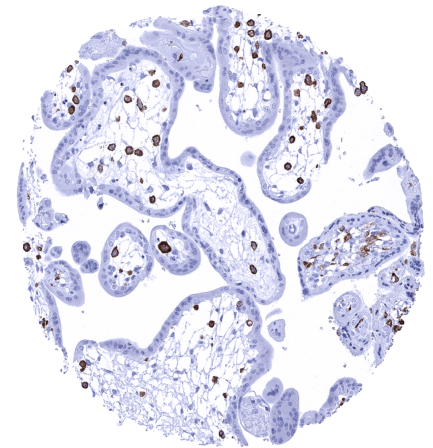
Localization	Cytoplasmic and Cell Surface
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Positive Control	Colon: An at least moderate to strong cytoplasmic AIF1 immunostaining is seen in mucosal macrophages.
Negative Control	Colon: AIF1 immunostaining should be absent in all non-inflammatory cells.



**Duodenum, mucosa - A strong AIF1 positivity is seen in mucosal macrophages of the duodenum.**



**Malignant mesothelioma (epitheloid subtype) containing numerous AIF1 positive inflammatory cells.**



**Placenta, early - AIF1 expression is particularly strong in macrophages of the placenta.**

### Biology

Allograft inflammatory factor 1 (AIF1) is coded by the AIF1 gene at 6p21.3 where it is located within the major histocompatibility complex class III region known to harbor clusters of genes involved in inflammatory responses. The function of AIF1 is not well known. The protein is upregulated in activated macrophages and neutrophils in response to the cytokine IFN- $\gamma$ . AIF1 impacts the expression of several important mediators such as cytokines, chemokines and inducible nitric oxide synthase. It is involved in inflammatory responses, auto-immune diseases, reproductive immunity as well as immune activation and macrophage function. AIF1 may also regulate several important cell adhesion molecules. In normal tissues, AIF1 immunostaining is seen in virtually all organs at varying levels of intensity in histiocytes/macrophages. The staining intensity varies depending on the location of cells and also between different samples from identical tissues. For example, AIF1 immunostaining is considerably weaker in dendritic cells/macrophages of the germinal centre than in macrophages of the interfollicular area in lymph nodes and tonsils. Kupffer cells of the liver, microglia and granulocytes also stain AIF1 positive. In the kidney, a moderate to strong membranous staining of glomeruli is seen. A positive AIF1 immunostaining of inflammatory cells is invariably seen in tumors. The quantity of positive cells and also the staining intensity of positive cells is highly variable, however. There is no evidence of AIF1 production in epithelial tumor cells so far. TCGA data suggest, that a high level of AIF1 RNA expression may be linked to unfavorable disease course in kidney cancer

### Potential Research Applications

AIF1 expression may represent a marker for the activity of macrophages. In general, AIF1 plays an important but largely unknown role in immunology. AIF1 is thus an important research target.

### 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).

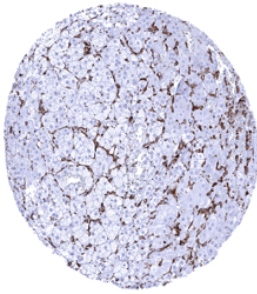
### Limitations

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

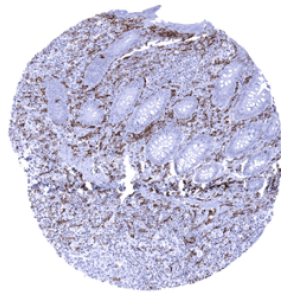
Not for resale without express authorization.

### Warranty

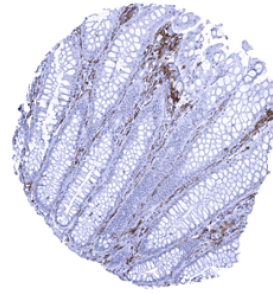
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product. Not for resale without express authorization.



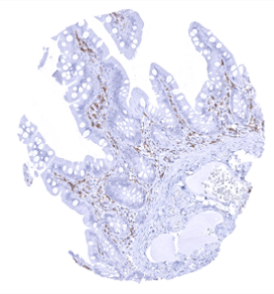
Adrenal gland - A strong AIF1 immunostaining is seen in macrophages in the adrenal gland



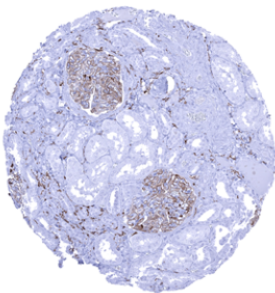
Appendix, mucosa



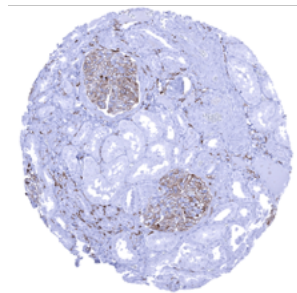
Colon descendens, mucosa - A strong AIF1 positivity is seen in mucosal macrophages



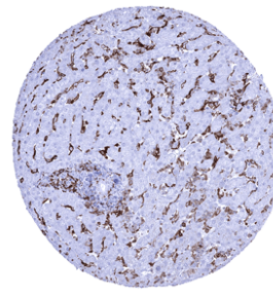
Ileum, mucosa - A strong AIF1 positivity is seen in mucosal macrophages



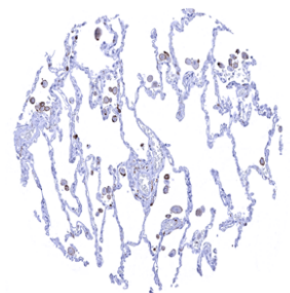
Kidney, cortex - A moderate to strong membranous AIF1 positivity is seen in glomeruli of the kidney. AIF1 staining also occurs in macrophages



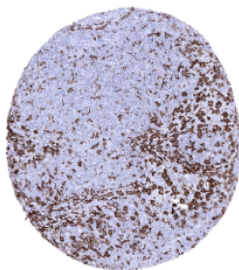
Kidney, medulla



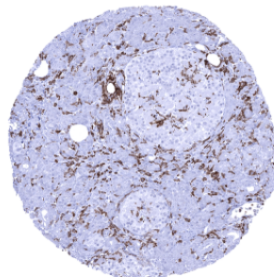
Liver. A strong AIF1 immunostaining occurs in Kupffer cells and intrasinusoidal monocytes



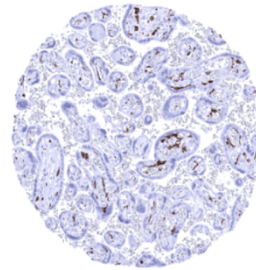
Lung - Alveolar macrophages show a significant AIF1 immunostaining



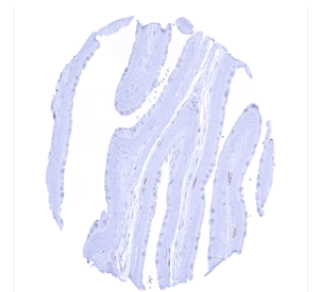
Lymph node - AIF1 positive macrophages are abundant in lymph nodes



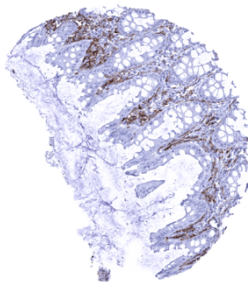
Pancreas - A moderate to strong AIF1 positivity is seen in macrophages of the pancreas



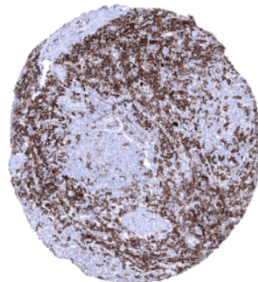
Placenta, mature – AIF1 expression is particularly strong in macrophages of the placenta



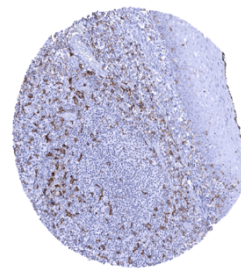
Placenta, mature, amnion and chorion



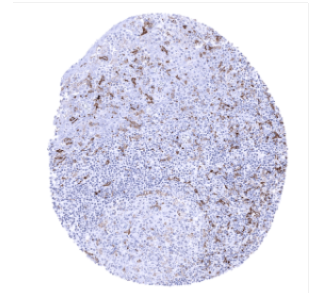
Rectum, mucosa - A strong AIF1 positivity is seen in mucosal macrophages



Spleen - Numerous AIF1 positive monocytes\_macrophages are seen in the spleen



Tonsil, surface epithelium



Tonsil