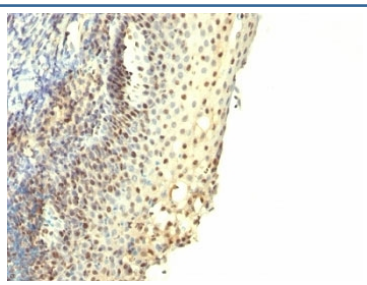
IPO-38 Antibody IPO-38 / Proliferation Marker [clone IPO-38] (V3069)

Catalog No.	Formulation	Size
V3069-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3069-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3069SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3069IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

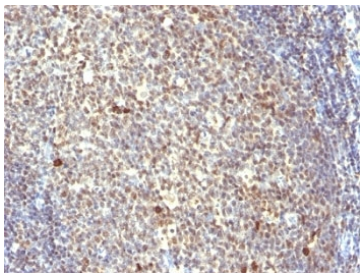
Citations (7)

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgM, kappa
Clone Name	IPO-38
Purity	PEG precipitation
UniProt	Not Known
Localization	Nuclear
Applications	Immunohistochemistry (FFPE): 0.5-1ug/ml for 30 min at RT
Limitations	This IPO-38 Antibody IPO-38 / Proliferation Marker is available for research use only.



IPO-38 Antibody IPO-38 Staining of Human Tonsil Squamous Epithelium IHC. Immunohistochemistry of formalin-fixed, paraffin-embedded human tonsil tissue using IPO-38 Antibody clone IPO-38. Heat-induced epitope retrieval was performed by boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at room temperature for 20 min. Nuclear staining is observed in a subset of cells within the tonsillar squamous epithelium, consistent with the localization of the IPO-38 proliferation marker in actively proliferating cells.



IPO-38 Antibody IPO-38 Staining of Human Tonsil Lymphoid Tissue IHC. Immunohistochemistry of formalin-fixed, paraffin-embedded human tonsil tissue using IPO-38 Antibody clone IPO-38. Heat-induced epitope retrieval was performed by boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at room temperature for 20 min. Numerous IPO-38-positive nuclei are visible throughout the lymphoid tissue, demonstrating detection of the nuclear proliferation-associated IPO-38 antigen in a proliferatively active tonsillar compartment.

Description

IPO-38 Antibody IPO-38 / Proliferation Marker recognizes IPO-38, a proliferation-associated nuclear antigen originally identified using monoclonal antibodies generated against spleen cells from a patient with hairy cell leukemia. The IPO-38 antigen has an apparent molecular weight of approximately 14-16 kDa and is associated with actively proliferating cells. Expression has been reported in proliferating lymphoid cells and a variety of malignant tissues, while resting lymphocytes and granulocytes show little or no detectable IPO-38 expression. These characteristics established IPO-38 as a useful marker for studying cellular proliferation and tumor growth.

IPO-38 expression is closely associated with entry into the cell cycle. Studies of stimulated lymphocytes have reported detection of the antigen following mitogenic activation, including during early G1 phase, whereas unstimulated lymphocytes lack detectable expression. The proliferation-dependent pattern makes IPO-38 complementary to established approaches for evaluating proliferative activity. IPO-38 immunoreactivity has been investigated in hematologic malignancies, including Hodgkin lymphoma, non-Hodgkin lymphoma and leukemia, as well as in solid tumors such as breast and colorectal carcinomas.

Monoclonal clone IPO-38 has a particularly useful history as the antibody from which the IPO-38 proliferation marker takes its name. The original IPO series of monoclonal antibodies was developed for investigation of malignant lymphoproliferative disorders, and subsequent characterization established IPO-38 as recognizing a nuclear antigen associated with proliferating cells. Later research has extended the use of IPO-38 immunoreactivity to studies of tumor proliferative activity and has investigated the molecular nature of the epitope recognized by the antibody. This publication history distinguishes clone IPO-38 from newer monoclonal antibodies directed against the same proliferation-associated marker.

Because proliferative activity is an important feature of tumor biology, antibodies to proliferation-associated nuclear antigens can help researchers characterize differences in cell growth across experimental samples. IPO-38 provides an alternative proliferation marker for studies in which researchers want to examine nuclear staining associated with actively cycling cells. Its historical use in lymphoproliferative disease research is particularly relevant to investigations of lymphoma, leukemia and activated lymphocytes, while studies in solid tumors have broadened its research context.

NSJ Bioreagents' IPO-38 Antibody uses the well-established clone IPO-38, a mouse monoclonal antibody recognizing the proliferation-associated IPO-38 nuclear antigen. The antibody provides researchers with a reagent for investigating IPO-38 expression and cellular proliferation in appropriately validated experimental systems. An IPO-38 Antibody can be used to study this nuclear proliferation marker and its relationship to proliferative activity in cancer and other cell biology research.

Researchers studying proliferative activity in tumors can explore additional reagents on our Cancer Marker Antibodies page.

Application Notes

Optimal dilution of the IPO-38 Antibody IPO-38 / Proliferation Marker should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate buffer, pH 6.0, for 10-20 min followed

by cooling at RT for 20 min.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Spleen cells from a patient with hairy cell leukemia were used as the immunogen for the IPO-38 antibody.

Storage

Store the IPO-38 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

IPO-38 antibody, IPO38 antibody, IPO-38 proliferation marker antibody, proliferation marker IPO-38 antibody

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