

PRODUCT INFORMATION



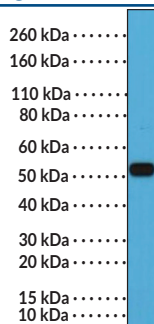
IRF4/MUM1 (C-Term) Rabbit Monoclonal Antibody (Clone RM352)

Item No. 32282

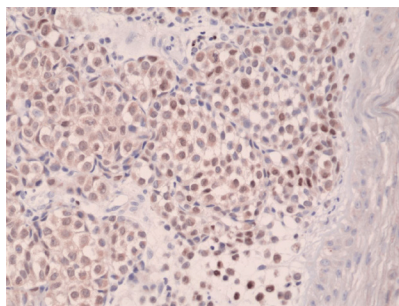
Overview and Properties

Contents:	This vial contains 100 µl of protein A-affinity purified monoclonal antibody.
Synonyms:	Interferon Regulatory Factor 4, LSIRF, Lymphocyte-specific Interferon Regulatory Factor, Multiple Myeloma Oncogene 1
Immunogen:	Peptide from the C-terminal region of human IRF4
Cross Reactivity:	(+) IRF4
Species Reactivity:	(+) Human
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS, with 50% glycerol, 1% BSA, and 0.09% sodium azide
Clone:	RM352
Host:	Rabbit
Isotype:	IgG
Applications:	Immunohistochemistry (IHC) and Western blot (WB); the recommended starting dilution is 1:200-1:800 for IHC and 1:1,000-1:2,000 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

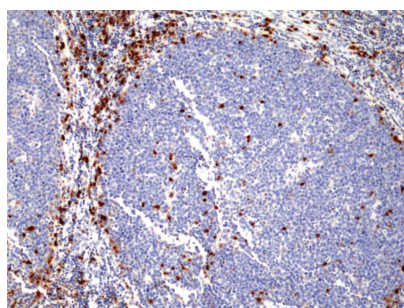
Images



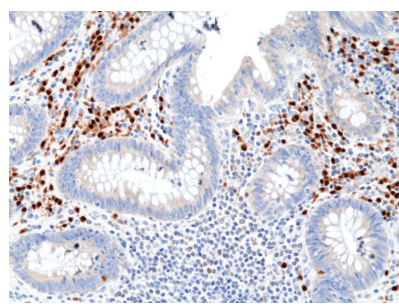
WB of Raji cells using IRF4/MUM1 (C-Term) Rabbit Monoclonal Antibody (Clone RM352) at a dilution of 1:1,000.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human melanoma tissue using IRF4/MUM1 (C-Term) Rabbit Monoclonal Antibody (Clone RM352) at a dilution of 1:250.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human tonsil tissue using IRF4/MUM1 (C-Term) Rabbit Monoclonal Antibody (Clone RM352) at a dilution of 1:800.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human appendix tissue using IRF4/MUM1 (C-Term) Rabbit Monoclonal Antibody (Clone RM352) at a dilution of 1:800.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 02/13/2024

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM

PRODUCT INFORMATION



Description

Interferon regulatory factor 4 (IRF4), also known as multiple myeloma oncogene 1 (MUM1), is a transcription factor and member of the IRF family with roles in lymphocyte activation and the generation of immunoglobulin-secreting (Ig-secreting) plasma cells.^{1,2} It is composed of an N-terminal DNA binding domain, a linker domain, an interferon activation domain, and a C-terminal autoinhibitory region.³ IRF4 is primarily expressed in plasma cells and activated T cells but is also expressed in the heart, kidney, liver, and brain.^{2,3} Unlike other IRF transcription factors, IRF4 is not IFN-responsive and is activated by induction of the NF- κ B pathway by various activators of lymphocyte activation and differentiation, such as LPS, concanavalin A (Item No. 14951), bacterial toxins, IL-4, and antigen receptor engagement.² *Irf4*^{-/-} mice lack Ig-secreting plasma cells, as well as exhibit defective T helper cell differentiation and decreased survival in a model of bacterial CpG-induced septic shock.⁴ *IRF4* expression is associated with poor prognosis in patients with B cell chronic lymphocytic leukemia/small lymphocytic lymphoma (B-CLL/SLL).⁵ Cayman's IRF4/MUM1 (C-Term) Rabbit Monoclonal Antibody (Clone RM352) can be used for immunohistochemistry (IHC) and Western blot (WB) applications.

References

1. Shaffer, A.L., Emre, N.C.T., Lamy, L., *et al.* IRF4 addiction in multiple myeloma. *Nature* **454**(7201), 226-231 (2008).
2. Gualco, G., Weiss, L.M., and Bacchi, C.E. MUM1/IRF4: A Review. *Appl. Immunohistochem. Mol. Morphol.* **18**(4), 301-310 (2010).
3. Remesh, S.G., Santosh, V., and Escalante, C.R. Structural studies of IRF4 reveal a flexible autoinhibitory region and a compact linker domain. *J. Biol. Chem.* **290**(46), 27779-27790 (2015).
4. Shaffer, A.L., Emre, N.C.T., Romesser, P.B., *et al.* IRF4: Immunity. Malignancy! Therapy? *Clin. Cancer Res.* **15**(9), 2954-2961 (2009).
5. Ito, M., Iida, S., Inagaki, H., *et al.* MUM1/IRF4 expression is an unfavorable prognostic factor in B-cell chronic lymphocytic leukemia (CLL)/small lymphocytic lymphoma (SLL). *Jpn. J. Cancer Res.* **93**(6), 685-694 (2002).