

#### DESCRIPTION

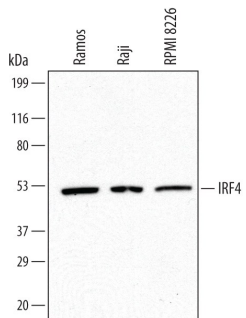
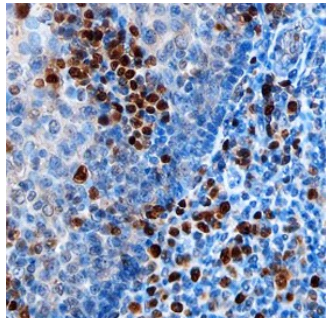
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human IRF4 in direct ELISAs. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) IRF3, rhIRF5, and rhIRF6 is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human IRF4 Glu130-Glu451 Accession # Q15306
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.5 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

#### DATA

<p><b>Western Blot</b></p>  <p><b>Detection of Human IRF4 by Western Blot.</b> Western blot shows lysates of Ramos human Burkitt's lymphoma cell line, Raji human Burkitt's lymphoma cell line, and RPMI 8226 human multiple myeloma cell line. PVDF membrane was probed with 0.5 µg/mL of Sheep Anti-Human IRF4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5525) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for IRF4 at approximately 53 kDa (as indicated). This experiment was conducted under reducing conditions and using <a href="#">Immunoblot Buffer Group 1</a>.</p>	<p><b>Immunohistochemistry</b></p>  <p><b>IRF4 in Human Tonsil.</b> IRF4 was detected in immersion fixed paraffin-embedded sections of human tonsil using Sheep Anti-Human IRF4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5525) at 3 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Sheep HRP-DAB Cell &amp; Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm of lymphocytes. View our protocol for <a href="#">Chromogenic IHC Staining of Paraffin-embedded Tissue Sections</a>.</p>
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#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

#### BACKGROUND

Interferon regulatory factor 4 (IRF4), also known as MUM1 and LSIRF, is a 51 kDa lymphocyte-restricted transcription factor. It is required for immunoglobulin class switching and terminal differentiation of B cells. IRF4 is overexpressed in multiple myeloma and cooperates with Myc in an autoregulatory loop. In T cells, IRF4 is required for the production of IL-4. IRF4 contains an N-terminal DNA binding domain that is homologous to that in other IRF proteins. Within the C-terminal domain (aa 130-451), human IRF4 shares 90% aa sequence identity with mouse and rat IRF4. Alternate splicing may generate isoforms with N-terminal, C-terminal, or internal deletions.