

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IFITM1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 40% cross-reactivity with recombinant human (rh) IFITM2 and rhIFITM3 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human IFITM1 Met1-His36 Accession # NP_003632
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

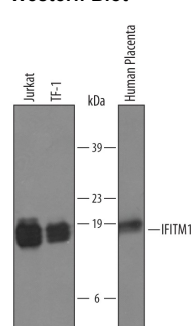
APPLICATIONS

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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below

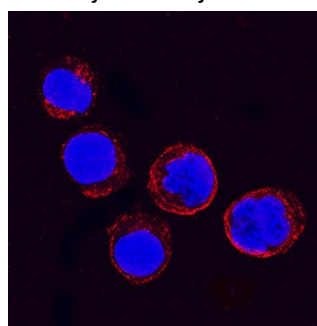
DATA

Western Blot



Detection of Human IFITM1 by Western Blot. Western blot shows lysates of Jurkat human acute T cell leukemia cell line, TF-1 human erythroleukemic cell line, human placenta tissue. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human IFITM1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4827) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for IFITM1 at approximately 17 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immoblot Buffer Group 8](#).

Immunocytochemistry



IFITM1 in K562 Human Cell Line. IFITM1 was detected in immersion fixed K562 human chronic myelogenous leukemia cell line using Goat Anti-Human IFITM1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4827) at 1.7 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to plasma membranes and cytoplasm. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

IFITM1 (Interferon inducible transmembrane protein 1; also Leu13, CD225 and "9-27") is a 17 kDa member of the CD225 family of proteins. It is inducible in multiple cell types by both type I and II interferons, and although reported to occur on the cell surface, is apparently concentrated in the ER. Homotypic IFITM1 interactions promote p53 antiproliferative activity by blocking p53 phosphorylation on Thr55. Human IFITM1 is a 2-transmembrane protein 125 amino acids (aa) in length. The topology of the molecule is unclear, but transmembrane segments are reported between aa 37-57 and 87-107. Over aa 1-36, human IFITM1 shares only 47% aa identity with mouse IFITM1.