

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ISG15/UCRP in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 539442
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human ISG15/UCRP Gly2-Gly157 Accession # ABW03539
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.

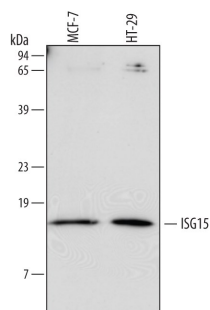
APPLICATIONS

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	0.5 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	Immersion fixed paraffin-embedded sections of human endometrial cancer tissue
Simple Western	5 µg/mL	MCF-7 human breast cancer cell line and HT-29 human colon adenocarcinoma cell line

DATA

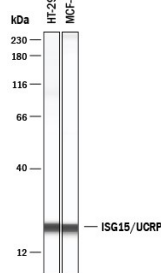
Western Blot



Detection of Human ISG15/UCRP by Western Blot.

Western blot shows lysates of MCF-7 human breast cancer cell line and HT-29 human colon adenocarcinoma cell line. PVDF membrane was probed with 0.5 µg/mL of Mouse Anti-Human ISG15/UCRP Monoclonal Antibody (Catalog # MAB4845) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for ISG15/UCRP at approximately 15 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.

Simple Western

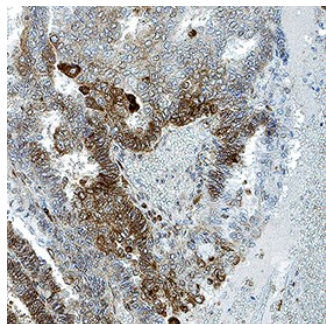


Detection of Human ISG15/UCRP by Simple Western™.

Simple Western lane view shows lysates of MCF-7 human breast cancer cell line and HT-29 human colon adenocarcinoma cell line, loaded at 0.2 mg/mL. A specific band was detected for ISG15/UCRP at approximately 20 kDa (as indicated) using 5 µg/mL of Mouse Anti-Human ISG15/UCRP Monoclonal Antibody (Catalog # MAB4845). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



Immunohistochemistry



Detection of ISG15/UCRP in Human Endometrial Cancer.

ISG15/UCRP was detected in immersion fixed paraffin-embedded sections of Human Endometrial Cancer using Mouse Anti-Human ISG15/UCRP Monoclonal Antibody (Catalog # MAB4845) at 0.5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in cancer cells. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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

ISG15 (interferon-induced 15 kDa protein; also known as IP17) is a 15 kDa ubiquitin family protein that is expressed by a wide variety of cell types. ISG15 is induced by type I IFN, and like ubiquitin, becomes conjugated to intracellular proteins. Unlike ubiquitin, it does not target proteins for degradation. Instead, it is part of the antiviral response. Human proISG15 is 165 amino acids (aa) in length. There are two ubiquitin-like domains (aa 2-78 and 79-157) and a propeptide (aa 158-165) that is cleaved intracellularly. Select blood mononuclear cells secrete mature ISG15, which is chemotactic for neutrophils. Mature human ISG15 shares 66% aa sequence identity with mouse ISG15.