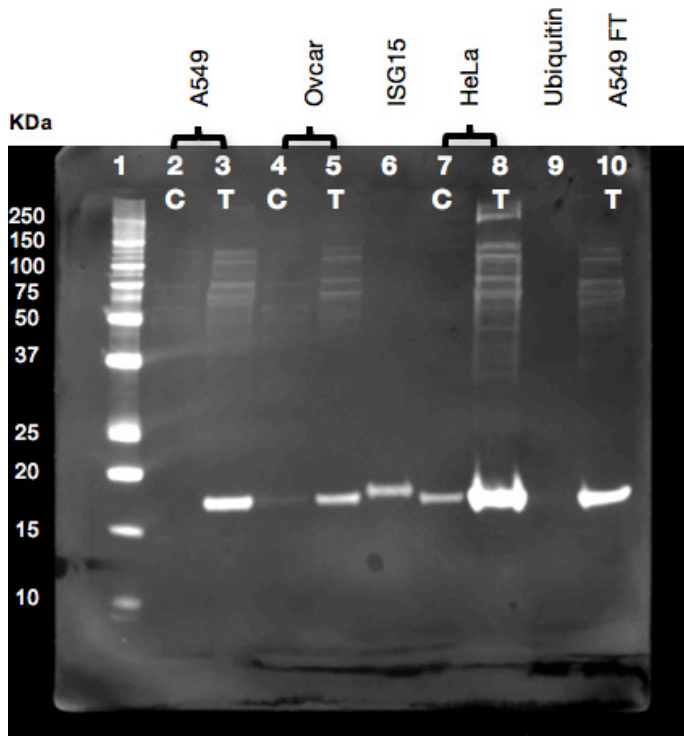


Anti-Human ISG15 MAb

Mouse Monoclonal Antibody against Human ISG15, Clone 2.1
Catalog No. 21900-1



- Detects conjugated and free ISG15
- Greater than 95% purity
- No cross-reactivity observed with ubiquitin on **Western Blot**

Figure 1. Western Blot. Control (C) and Treated (T) 40 μ g lysate samples from A549, Ovcar and HeLa cells were run alongside 50 ng recombinant ISG15 and 100 μ g ubiquitin on a 12% SDS-PAGE gel under reducing conditions. Cells were either untreated (C) or treated (T) with 1000 U/ml of Human IFN beta 1a (PBL Catalog No. 11410-2) and lysed with 50 mM Tris-HCl pH8, 200 mM NaCl, 10% Glycerol, 0.5% NP-40, 0.1 mM EDTA with protease inhibitors on ice for one hour and then centrifuged at 4°C to obtain supernatants. No cross-reactivity was observed with ubiquitin at tested concentrations up to 100 μ g. The antibody was additionally tested on Daudi and U937 cell lysates (data not shown).

*A549 FT: Lysate after one freeze-thaw cycle

Product Information

Catalog Number	21900-1
Description	Mouse Monoclonal Antibody against Human ISG15
Size	100 µg
Purity	> 95%
Endotoxin	< 1 EU/µg

Many published reports indicate that ISG15 (G1P2) is commonly upregulated in response to Type I interferon stimulation. Though a wide range of cellular activities are influenced by ISG15 expression including Type I interferon signaling, translation, chromatin remodeling, cell motility, protein trafficking, and protein conjugation (ISGylation), the complete spectrum of ISG15-dependent biological sequelae remains to be fully elucidated. Further characterization of new ISG15 target proteins and the role of free ISG15 may offer new insights into mechanistic and immunotherapeutic approaches to human diseases.

Research Citations and General References

1. N Arnaud, S Dabo, D Akazawa, M Fukasawa, F Shinkai-Ouchi, J Hugon, T Wakita, and EF Meurs. "Hepatitis C Virus Reveals a Novel Early Control in Acute Immune Response," *PLoS Pathog*, 2011, 7(10): e1002289.
2. C Dieterich and DA Relman. "Modulation of the Host Interferon Response and ISGylation Pathway by B. pertussis Filamentous Hemagglutinin," *PLoS ONE*, 2011, 6(11): e27535.
3. YB Zhang, YL Wang, and JF Gui. "Identification and characterization of two homologues of interferon-stimulated gene ISG15 in crucian carp," *Fish and Shellfish Immunology*, 2007, 23(1): 52-61.
4. T Takeuchi, T Kobayashi, S Tamura, and H Yokosawa. "Negative regulation of protein phosphatase 2C β by ISG15 conjugation," *FEBS Letters*, 2006, 580(18): 4521-4526.
5. MP Malakhov, K Il Kim, OA Malakhova, BS Jacobs, EC Borden, and D Zhang. "High-throughput Immunoblotting: Ubiquitin-like Protein ISG15 Modifies Key Regulators of Signal Transduction," *JBC*, 2003, 278, 16608-16613.
6. J D'Cunha, S Ramanujam, RJ Wagner, PL Witt, E Knight, Jr and EC Borden. "In vitro and in vivo secretion of human ISG15, an IFN-induced immunomodulatory cytokine," *Journal of Immunology*, 1996, 157:4100.
7. J D'Cunha, E Knight, Jr, AL Hass, RL Trutt and EC Borden. "Immunoregulatory properties of ISG15, an interferon-induced cytokine," *PNAS*, 1996, 93:211.