

ISG15 recombinant antibody

ISG15 Recombinant Monoclonal Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA278990	HEK293F Cell	Human	Flow Cytometry, Functional Assay, Immunohistochemistry, ELISA

PRODUCT SYNONYMS

ISG15; Monoclonal Recombinant Antibody; ISG15 Recombinant Monoclonal Antibody; Ubiquitin-like protein ISG15 (Interferon-induced 15 kDa protein)(Interferon-induced 17 kDa protein)(IP17)(Ubiquitin cross-reactive protein)(hUCRP); G1P2 UCRP; ISG15 recombinant antibody

PRODUCT SPECIFICATIONS

Host	HEK293F Cell
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Number	16D8
Purity/Purification	Affinity purified
Form/Format	Liquid; PBS, 150mM NaCl, 0.02% sodium azide, 50% glycerol, pH 7.4.
Applicable Applications for ISG15 recombinant antibody	FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), ELISA
Immunogen Species	Human
Immunogen	A synthesized peptide derived from Human ISG15
Conjugation	Non-conjugated
Research Area	Epigenetics and Nuclear Signaling; Cell biology
Preparation and Storage	Upon receipt, store at -20 degree C or -80 degree C. Avoid repeated freeze.

IMAGES



FCM/FACS (Flow Cytometry)

Overlay Peak curve showing HepG2 cells stained with AAA278990 (red line) at 1:100. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1ug/1*106cells) for 45min at 4?. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4?.Control antibody (green line) was rabbit IgG (1ug/1*106cells) used under the same conditions. Acquisition of >10,000 events was performed.



IHC (Immunohistochemistry)

IHC image of AAA278990 diluted at 1:100 and staining in paraffin-embedded human salivary gland tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.05% DAB.

ADDITIONAL INFORMATION

Related Product Information for ISG15 recombinant antibody	Ubiquitin-like protein which plays a key role in the innate immune response to viral infection either via its conjugation to a target protein (ISGylation) or via its action as a free or unconjugated protein. ISGylation involves a cascade of enzymatic reactions involving E1, E2, and E3 enzymes which catalyze the conjugation of ISG15 to a lysine residue in the target protein (PubMed:33727702). Its target proteins include IFIT1, MX1/MxA, PPM1B, UBE2L6, UBA7, CHMP5, CHMP2A, CHMP4B and CHMP6. Isgylation of the viral sensor IFIH1/MDA5 promotes IFIH1/MDA5 oligomerization and triggers activation of innate immunity against a range of viruses, including coronaviruses, flaviviruses and picornaviruses (PubMed:33727702). Can also isgylate: EIF2AK2/PKR which results in its activation, DDX58/RIG-I which inhibits its function in antiviral signaling response, EIF4E2 which enhances its cap structure-binding activity and translation-inhibition activity, UBE2N and UBE2E1 which negatively regulates their activity, IRF3 which inhibits its ubiquitination and degradation and FLNB which prevents its ability to interact with the upstream activators of the JNK cascade thereby inhibiting IFNA-induced JNK signaling. Exhibits antiviral activity towards both DNA and RNA viruses, including influenza A, HIV-1 and Ebola virus. Restricts HIV-1 and ebola virus via disruption of viral budding. Inhibits the ubiquitination of HIV-1 Gag and host TSG101 and disrupts their interaction, thereby preventing assembly and release of virions from infected cells. Inhibits Ebola virus budding mediated by the VP40 protein by disrupting ubiquitin ligase activity of NEDD4 and its ability to ubiquitinate VP40. ISGylates influenza A virus NS1 protein which causes a loss of function of the protein and the inhibition of virus replication. The secreted form of ISG15 can: induce natural killer cell proliferation, act as a chemotactic factor for neutrophils and act as a IFN-gamma-inducing cytokine playing an essential role in antimycobacterial immunity. The secreted form acts through the integrin ITGAL/ITGB2 receptor to initiate activation of SRC family tyrosine kinases including LYN, HCK and FGR which leads to secretion of IFNG and IL10; the interaction is mediated by ITGAL (PubMed:29100055). {ECO:0000269 PubMed:1373138, ECO:0000269 PubMed:16009940, ECO:0000269 PubMed:16112642, ECO:0000269 PubMed:16428300, ECO:0000269 PubMed:16434471, ECO:0000269 PubMed:16872604, ECO:0000269 PubMed:18305167, ECO:0000269 PubMed:19270716, ECO:0000269 PubMed:19357168, ECO:0000269 PubMed:2005397, ECO:0000269 PubMed:20133869, ECO:0000269 PubMed:20308324, ECO:0000269 PubMed:20639253, ECO:0000269 PubMed:21543490, ECO:0000269 PubMed:22693631, ECO:0000269 PubMed:22859821, ECO:0000269 PubMed:23229543, ECO:0000269 PubMed:29100055, ECO:0000269 PubMed:33727702, ECO:0000269 PubMed:7526157, ECO:0000269 PubMed:8550581}.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4826774
NCBI GeneID	9636
NCBI Accession #	NP_005092.1
NCBI GenBank Nucleotide #	NM_005101.3
UniProt Accession #	P05161; Q5SVA4; Q7Z2G2; Q96GF0
Molecular Weight	17,888 Da
NCBI Official Full Name	ubiquitin-like protein ISG15
NCBI Official Synonym Full Names	ISG15 ubiquitin-like modifier
NCBI Official Symbol	ISG15
NCBI Official Synonym Symbols	G1P2; IP17; UCRP; IFI15; hUCRP
NCBI Protein Information	ubiquitin-like protein ISG15; ubiquitin cross-reactive protein; interferon-stimulated protein, 15 kDa; interferon-induced 17-kDa/15-kDa protein; interferon, alpha-inducible protein (clone IFI-15K)
UniProt Protein Name	Ubiquitin-like protein ISG15
UniProt Gene Name	ISG15
UniProt Synonym Gene Names	G1P2; UCRP; IP17; hUCRP
UniProt Entry Name	ISG15_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

