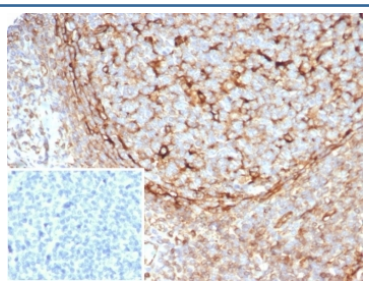
Stimulator of Interferon Genes Protein Antibody STING1/7434 / STING Protein Antibody [clone STING1/7434] (V5094)

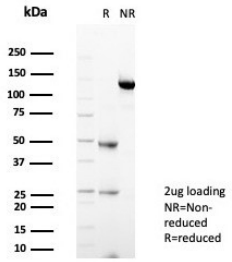
Catalog No.	Formulation	Size
V5094-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5094-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5094SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG, kappa
Clone Name	STING1/7434
Purity	Protein A/G affinity
UniProt	Q86WV6
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Stimulator of Interferon Genes Protein Antibody STING1/7434 / STING Protein Antibody is available for research use only.



Stimulator of Interferon Genes Protein Antibody STING1/7434 in Human Tonsil IHC. Immunohistochemistry staining of FFPE human tonsil tissue with Stimulator of Interferon Genes Protein Antibody, clone STING1/7434. HIER was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 min followed by cooling before testing. Strong brown cytoplasmic staining is present in numerous lymphoid cells, with a heterogeneous distribution across the tissue. The PBS negative control inset shows minimal background staining. This result demonstrates detection of STING1/STING Protein in human tonsil tissue.



Purified Stimulator of Interferon Genes Protein Antibody STING1/7434 SDS-PAGE. SDS-PAGE analysis of 2 ug purified, BSA-free Stimulator of Interferon Genes Protein Antibody, clone STING1/7434, under reducing (R) and non-reducing (NR) conditions. The reduced preparation shows the expected antibody heavy and light chain components near approximately 50 and 25 kDa, respectively, while the non-reduced antibody migrates predominantly near approximately 150 kDa. The gel demonstrates the integrity of the purified STING Protein Antibody preparation.

Description

Stimulator of Interferon Genes Protein Antibody STING1/7434 / STING Protein Antibody recognizes STING1, an innate immune signaling protein encoded by the TMEM173 gene. Commonly called STING, the Stimulator of Interferon Genes protein functions as a central adaptor connecting cytosolic DNA recognition to type I interferon production. STING1 is also known as ERIS, MITA, and MPYS, reflecting its identification through studies of innate immune and interferon signaling.

STING1 is a core component of the cGAS-STING pathway. Cytosolic double-stranded DNA is recognized by cyclic GMP-AMP synthase (cGAS), which catalyzes formation of the second messenger cyclic GMP-AMP (cGAMP). Binding of cGAMP to STING promotes conformational activation and redistribution of STING from the endoplasmic reticulum toward Golgi-associated compartments. This trafficking enables assembly of downstream signaling complexes and activation of TANK-binding kinase 1 (TBK1).

TBK1 phosphorylates interferon regulatory factor 3 (IRF3), promoting its activation and subsequent transcription of type I interferons and interferon-stimulated genes. Through this mechanism, the Stimulator of Interferon Genes protein helps coordinate innate immune responses to intracellular pathogens and aberrantly localized DNA. Endogenous DNA associated with mitochondrial dysfunction, genomic instability, DNA damage, or other forms of cellular stress can also engage this signaling system.

STING1 biology is therefore relevant to research spanning infection, inflammation, autoimmunity, cellular stress, and cancer immunology. In tumors, cGAS-STING signaling can contribute to recognition of tumor-derived DNA and initiation of immune responses within the tumor microenvironment. Conversely, persistent or dysregulated STING activity can contribute to pathological inflammatory signaling, emphasizing the importance of controlled pathway activation.

Clone STING1/7434 is a mouse monoclonal antibody directed against the STING1 protein. NSJ Bioreagents offers this STING Protein Antibody as a clone-defined reagent for research into STING1 biology and innate immune signaling. A Stimulator of Interferon Genes Protein Antibody can support investigation of cytosolic DNA sensing, interferon regulation, inflammatory signaling, host defense, and cGAS-STING pathway biology.

For a polyclonal antibody with broader validation across the cGAS-STING signaling pathway, see our STING1 Antibody / cGAS-STING Pathway Antibody page.

Application Notes

Optimal dilution of the Stimulator of Interferon Genes Protein Antibody STING1/7434 / STING Protein Antibody should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 190-290) from the human protein was used as the immunogen for the Stimulator of Interferon Genes Protein Antibody STING1/7434.

Storage

Aliquot the Stimulator of Interferon Genes Protein Antibody STING1/7434 and store frozen at -20oC or colder. Avoid

repeated freeze-thaw cycles.

Alternate Names

Stimulator of interferon genes protein antibody, STING antibody, STING1 antibody, TMEM173 antibody, ERIS antibody, MITA antibody, MPYS antibody

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