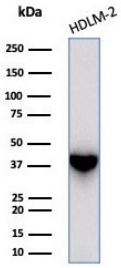
STING1 Antibody for WB STING1/7437 / STING1 Western Blot Antibody [clone STING1/7437] (V5097)

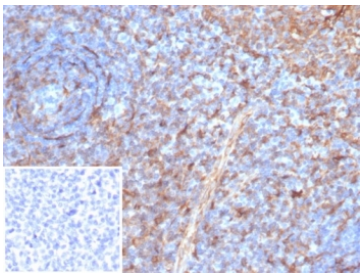
Catalog No.	Formulation	Size
V5097-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5097-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5097SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

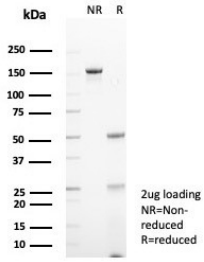
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	STING1/7437
Purity	Protein A/G affinity
UniProt	Q86WV6
Localization	Cytoplasm
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This STING1 antibody is available for research use only.



STING1 Antibody for WB STING1/7437 western blot analysis of human samples. Western blot testing was performed using STING1 Antibody for WB clone STING1/7437. Lane 1: human HDLM-2 cell lysate. A band is detected at approximately 42 kDa, consistent with the predicted molecular weight of Stimulator of interferon genes protein / STING1 (TMEM173). The observed band corresponds to the full-length STING adaptor protein, which is typically detected near its predicted molecular weight in SDS-PAGE analysis of cell lysates.



IHC staining of FFPE human tonsil tissue with STING1 antibody STING1/7437. Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free STING1 antibody (clone STING1/7437) as confirmation of integrity and purity.

Description

Stimulator of interferon genes protein (STING1), encoded by the STING1 gene also known as TMEM173, is an endoplasmic reticulum-associated adaptor protein that plays a central role in innate immune signaling. STING1 Antibody for WB enables detection of this signaling protein by western blot analysis, supporting studies of cytosolic DNA sensing pathways and interferon-mediated immune responses. STING1 functions as a key mediator of the cyclic GMP-AMP synthase (cGAS)-STING signaling pathway, which detects cytosolic DNA derived from pathogens, damaged host cells, or tumor cells. Upon binding cyclic dinucleotides such as cyclic GMP-AMP (cGAMP), STING undergoes conformational activation and translocates from the endoplasmic reticulum to the Golgi apparatus where it recruits downstream signaling molecules including TBK1 and IRF3. Activation of this pathway ultimately leads to transcriptional induction of type I interferons and other inflammatory cytokines that are essential for antiviral defense and innate immune activation.

Western blot analysis is widely used to study STING1 expression and activation states in cultured cells and tissue lysates. The STING1 protein contains multiple transmembrane domains and cytosolic signaling regions that allow interaction with downstream kinase complexes. Following activation of the cGAS-STING pathway, STING1 can undergo post-translational modifications including phosphorylation and ubiquitination that may influence its migration pattern on SDS-PAGE gels. Detection of STING1 by western blot therefore provides valuable insight into expression levels, signaling activation, and immune pathway regulation in experimental systems.

STING1 is broadly expressed in immune and non-immune cell types and contributes to host defense against viral and bacterial infections. Dysregulation of STING signaling has also been implicated in autoinflammatory diseases, cancer immunity, and responses to DNA damage. Because of its central role in innate immune signaling, STING1 antibodies are widely used to investigate cGAS-STING pathway activation and interferon signaling mechanisms.

A mouse monoclonal antibody such as clone STING1/7437 supports detection of STING1 protein in western blot experiments analyzing immune signaling pathways. Reliable detection of STING1 by SDS-PAGE and immunoblotting enables researchers to evaluate expression levels and pathway activation in studies of innate immunity, inflammation, and host defense.

Application Notes

Optimal dilution of the STING1 Antibody for WB STING1/7437 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 STING1 antibody.

Storage

Aliquot the STING1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

STING antibody, TMEM173 antibody, Stimulator of interferon genes protein antibody, Transmembrane protein 173 antibody