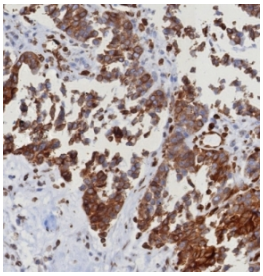
ERIS Antibody STING1/8187R / STING1 Rabbit Monoclonal Antibody [clone STING1/8187R] (V5101)

Catalog No.	Formulation	Size
V5101-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5101-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5101SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

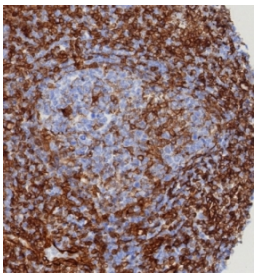
Recombinant RABBIT MONOCLONAL

Bulk quote request

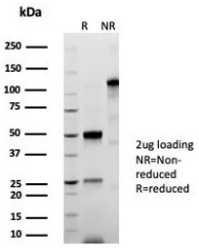
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	STING1/8187R
Purity	Protein A/G affinity
UniProt	Q86WV6
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This ERIS antibody is available for research use only.



ERIS Antibody STING1/8187R immunohistochemistry analysis of human tissue. IHC staining of formalin-fixed, paraffin-embedded human serous ovarian carcinoma using ERIS Antibody STING1/8187R demonstrates HRP-DAB brown cytoplasmic staining in tumor-associated cells consistent with expression of Stimulator of interferon genes protein / STING1 (TMEM173). Cytoplasmic signal highlights cells within the tumor microenvironment where STING-mediated innate immune signaling may occur. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 min followed by cooling prior to antibody incubation.



IHC staining of FFPE human spleen tissue with rabbit monoclonal ERIS antibody (clone STING1/8187R). 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 STING1/8187R) as confirmation of integrity and purity.

Description

Stimulator of interferon genes protein (STING1), encoded by the STING1 gene and also known as TMEM173 or ERIS (endoplasmic reticulum interferon stimulator), is an intracellular adaptor protein that plays a central role in cytosolic DNA sensing and innate immune signaling. ERIS Antibody STING1/8187R recognizes STING1, a signaling protein localized primarily to the endoplasmic reticulum that functions as a critical mediator of interferon induction following detection of foreign or damaged DNA within the cytoplasm. STING1 acts as a key component of the cyclic GMP-AMP synthase (cGAS)-STING pathway, which detects cytosolic DNA derived from viral infection, bacterial pathogens, mitochondrial damage, or genomic instability.

When cyclic GMP-AMP synthase binds cytosolic DNA, it produces the cyclic dinucleotide cGAMP, which directly activates STING1. Activated STING undergoes conformational changes and traffics from the endoplasmic reticulum to Golgi-associated vesicular compartments where it recruits downstream kinases including TBK1 and transcription factors such as IRF3. This signaling cascade leads to the production of type I interferons and other inflammatory cytokines that form a critical component of innate immune defense against infection. STING signaling therefore links detection of abnormal cytoplasmic DNA to activation of antiviral and inflammatory immune responses.

STING1 is broadly expressed in immune cells including macrophages, dendritic cells, and lymphocytes, as well as in many epithelial and stromal cell types. Activation of the STING pathway contributes to host defense against viruses and intracellular pathogens, while dysregulation of STING signaling has been implicated in autoinflammatory diseases, autoimmune disorders, and cancer immunity. Because of its central role in innate immune signaling, STING1 is widely studied in immunology and inflammation research.

A recombinant rabbit monoclonal antibody such as clone STING1/8187R supports detection of STING1 protein in research applications examining innate immune signaling pathways. Antibodies recognizing STING1 enable investigation of the cGAS-STING pathway, analysis of interferon-mediated immune responses, and study of immune signaling mechanisms involved in host defense and inflammatory disease.

Application Notes

Optimal dilution of the ERIS Antibody STING1/8187R 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 ERIS antibody.

Storage

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

Alternate Names

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