

PRODUCT INFORMATION



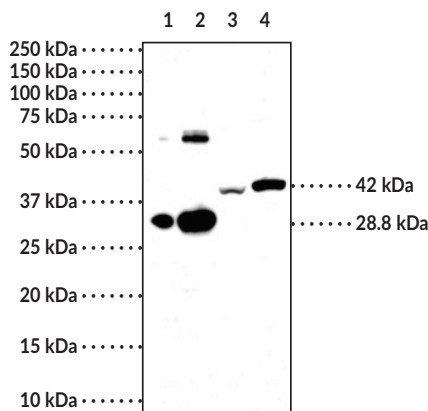
STING (C-Term) Monoclonal Antibody (Clone 1B10)

Item No. 25923

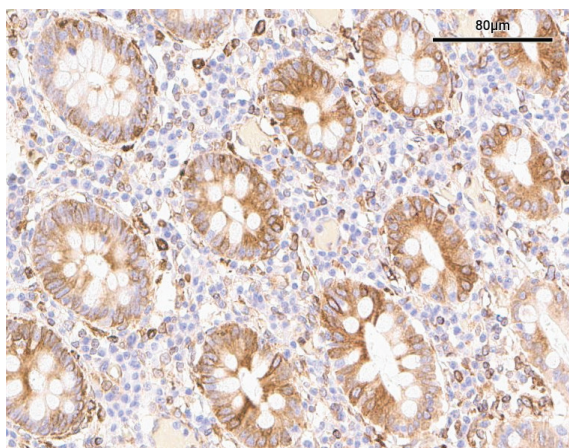
Overview and Properties

Contents:	This vial contains 100 µg of protein G-purified monoclonal antibody.
Synonyms:	Endoplasmic Reticulum Interferon Stimulator, ERIS, Mediator of IRF3 Activation, MITA, MPYS, Stimulator of Interferon Genes, TMEM173, Transmembrane Protein 173
Immunogen:	Synthetic peptide from the C-terminus (AA 351-379) of human STING protein
Species Reactivity:	(+) Human
Uniprot No.:	Q86WV6
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
Clone:	1B10
Host:	Mouse
Isotype:	IgG1
Applications:	ELISA, Immunohistochemistry (IHC), and Western blot (WB); the recommended starting dilution for ELISA and WB is 1:1,000 and 1:40 for IHC. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Lane 1: STING (139-379) Recombinant Protein (1 ng)
Lane 2: STING (139-379) Recombinant Protein (10 ng)
Lane 3: A431 Cell Lysate (50 µg)
Lane 4: THP1 Cell Lysate (50 µg)



Immunohistochemistry analysis of formalin-fixed, paraffin-embedded (FFPE) human colon tissue after heat induced antigen retrieval in pH 6.0 citrate buffer. After incubation with STING C-Term Monoclonal Antibody (Clone 1B10) (Item No. 25923) at a 1:40 dilution, slides were incubated with biotinylated secondary antibody, followed by alkaline phosphatase-streptavidin and chromogen (DAB).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
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Description

Stimulator of interferon genes (STING) is a component of the innate immune response that binds to cyclic dinucleotides (CDNs), which are bacterial second messengers, leading to activation of NF- κ B and transcription of immunomodulatory genes, including type I interferon (IFN).¹⁻⁴ The C-terminal region of STING binds to CDNs, such as cyclic di-GMP (c-di-GMP; Item No. 17144) in the cytoplasm at a ratio of two STING molecules to one c-di-GMP.^{4,5} Mutations in the C-terminal region modify the activity of STING in a variety of ways.⁴ Certain mutations, such as the mutation found in the Goldenticket mouse strain, I199N, prevent STING from binding to CDNs and from inducing an IFN response. However, other mutations in the C-terminal region allow STING to bind c-di-GMP but not induce IFN, hyperinduce IFN without binding c-di-GMP, or induce IFN only when overexpressed and without binding c-di-GMP. STING inhibition has the potential to be beneficial for the treatment of autoimmune diseases that are associated with uncontrolled activation of the STING pathway, while activation of STING can lead to an adaptive immune response that reduces tumor growth in animal models.⁶⁻⁹ Cayman's STING (C-Term) Monoclonal Antibody (Clone 1B10) can be used for Western blot and ELISA applications. The antibody recognizes the C-terminal region of STING at 42 kDa from human samples.

References

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