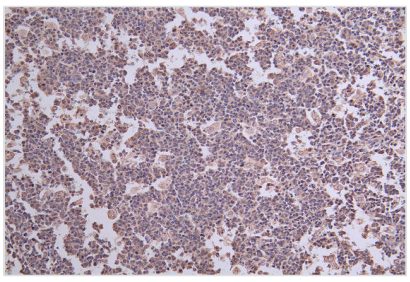
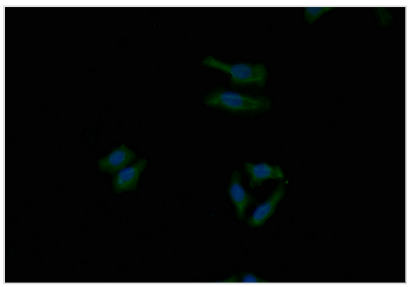
THEMIS Recombinant Monoclonal Antibody

Product Code	CSB-RA262013A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q8N1K5
Immunogen	A synthesized peptide derived from Human THEMIS
Species Reactivity	Human
Tested Applications	ELISA, IHC, IF, FC; Recommended dilution: IHC:1:50-1:200, IF:1:50-1:200, FC:1:50-1:200
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Immunology;Stem cells
Gene Names	THEMIS
Clone No.	7G7

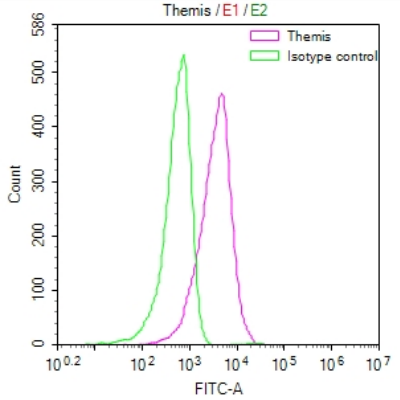
Image



IHC image of CSB-RA262013A0HU diluted at 1:50 and staining in paraffin-embedded human tonsil 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 0.30% DAB.



Immunofluorescence staining of HepG2 with CSB-RA262013A0HU at 1:40, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 503-congugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Overlay Peak curve showing Jurkat cells stained with CSB-RA262013A0HU (red line) at 1:50. 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 (1μg/1*10^{6}cells) 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 (1μg/1*10^{6}cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

The THEMIS recombinant monoclonal antibody production is a meticulously coordinated process. It commences with in vitro cloning, where genes encoding both THEMIS antibody's heavy and light chains are seamlessly incorporated into expression vectors, which are subsequently introduced into host cells, facilitating the recombinant antibody's expression within a cell culture environment. Following expression, the antibody undergoes purification from the supernatant of transfected host cell lines through an affinity-chromatography purification method. This antibody can detect the human THEMIS protein in four applications, including ELISA, IHC, IF, and FC.

THEMIS is a critical protein in the thymus that plays a central role in the development, selection, and function of T cells in the immune system. Its functions are crucial for the proper functioning of the adaptive immune response and the maintenance of immune tolerance.