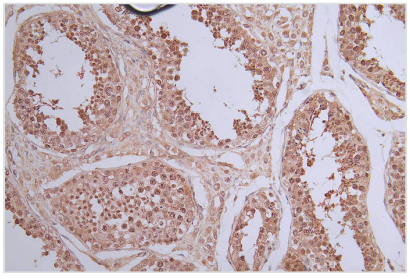
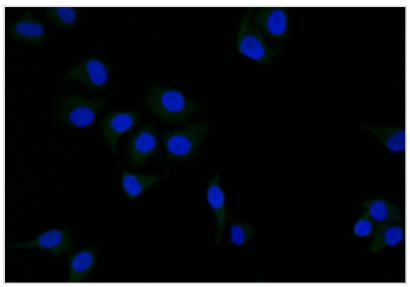
STAT1 Recombinant Monoclonal Antibody

Product Code	CSB-RA989713A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P42224
Immunogen	A synthesized peptide derived from Human STAT1
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	Epigenetics and Nuclear Signaling;Cancer;Signal transduction
Gene Names	STAT1
Clone No.	6C10

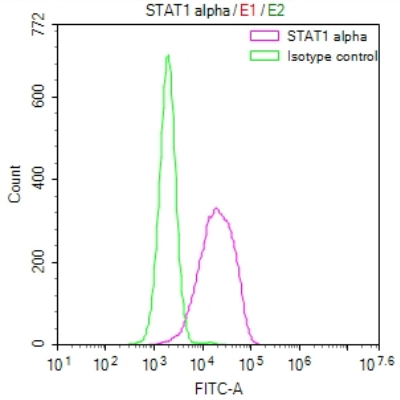
Image



IHC image of CSB-RA989713A0HU diluted at 1:50 and staining in paraffin-embedded human testis 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 0.40% DAB.



Immunofluorescence staining of Hela with CSB-RA989713A0HU at 1:25, 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 508-congugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Overlay Peak curve showing HepG2 cells stained with CSB-RA989713A0HU (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*10^6cells) 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*10^6cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

The STAT1 recombinant monoclonal antibody is the result of a meticulously orchestrated production process. It commences with in vitro cloning, where genes encoding both the heavy and light chains of the STAT1 antibody are seamlessly incorporated into expression vectors. Subsequently, these vectors are introduced into host cells, paving the way for the recombinant antibody's expression within a cell culture milieu. After expression, the STAT1 recombinant monoclonal antibody is subjected to a precise purification process, reliant on the effectiveness of affinity chromatography. A remarkable characteristic of this antibody is its high specificity in binding to the human STAT1 protein. Furthermore, its adaptability is evident, as it is suitable for a diverse range of applications, including ELISA, IHC, IF, and FC.

STAT1 is a versatile transcription factor that plays a crucial role in immune responses, antiviral defense, inflammation, cell growth, and differentiation. Dysregulated STAT1 signaling can contribute to autoimmune diseases by promoting excessive immune responses and inflammation and is associated with increased cancer risk.