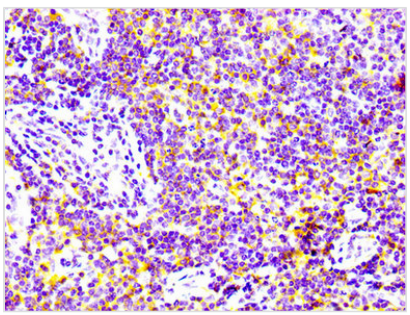
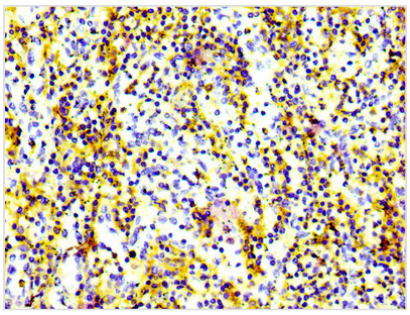
CD97 Recombinant Monoclonal Antibody

Product Code	CSB-RA004972A0HU
Abbreviation	CD97 antigen
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P48960
Immunogen	A synthesized peptide
Species Reactivity	Human
Tested Applications	ELISA, IHC, IF; Recommended dilution: IHC:1:50-1:500, IF:1:30-1:200
Relevance	Receptor potentially involved in both adhesion and signaling processes early after leukocyte activation. Plays an essential role in leukocyte migration (By similarity).
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	Neuroscience
Gene Names	CD97
Clone No.	3A7

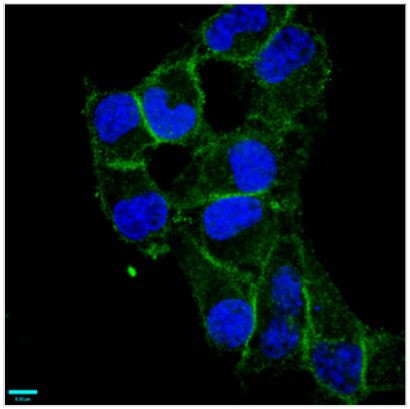
Image



IHC image of CSB-RA004972A0HU diluted at 1:100 and staining in paraffin-embedded human lymph node 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? overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



IHC image of CSB-RA004972A0HU diluted at 1:100 and staining in paraffin-embedded human spleen 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? overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Immunofluorescence staining of Hela cells with CSB-RA004972A0HU at 1:87.5,counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4?.The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

The CD97 recombinant monoclonal antibody is generated through a combination of protein technology and DNA recombinant techniques. It begins with the immunization of animals using a synthetic peptide derived from human CD97, resulting in the production of B cells. Positive B cells are then isolated and subjected to single clone identification. The genes encoding the light and heavy chains of the CD97 antibody are amplified using PCR and inserted into a plasmid vector to create a recombinant vector, which is introduced into host cells for antibody expression. The CD97 recombinant monoclonal antibody is purified from the cell culture supernatant using affinity chromatography. Stringent validation procedures ensure its accuracy and suitability for ELISA, IHC, and IF applications. With its ability to specifically detect human CD97 protein, the CD97 recombinant monoclonal antibody is a valuable tool for research purposes.