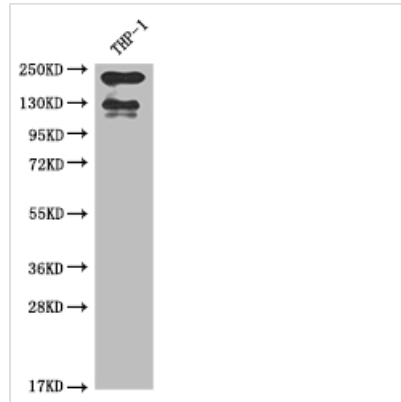




ITGAL Recombinant Monoclonal Antibody

Product Code	CSB-RA787996A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P20701
Immunogen	A synthesized peptide derived from human ITGAL
Species Reactivity	Human
Tested Applications	ELISA, WB, IF Recommended dilution: WB:1:500-1:2000, IF:1:50-1:200
Relevance	<p>Integrin ITGAL/ITGB2 is a receptor for ICAM1, ICAM2, ICAM3 and ICAM4. Integrin ITGAL/ITGB2 is a receptor for F11R (PubMed:11812992, PubMed:15528364). Integrin ITGAL/ITGB2 is a receptor for the secreted form of ubiquitin-like protein ISG15; the interaction is mediated by ITGAL (PubMed:29100055). Involved in a variety of immune phenomena including leukocyte-endothelial cell interaction, cytotoxic T-cell mediated killing, and antibody dependent killing by granulocytes and monocytes. Contributes to natural killer cell cytotoxicity (PubMed:15356110). Involved in leukocyte adhesion and transmigration of leukocytes including T-cells and neutrophils (PubMed:11812992). Required for generation of common lymphoid progenitor cells in bone marrow, indicating a role in lymphopoiesis (By similarity). Integrin ITGAL/ITGB2 in association with ICAM3, contributes to apoptotic neutrophil phagocytosis by macrophages (PubMed:23775590).</p> <p>{ECO:0000250 UniProtKB:P24063, ECO:0000269 PubMed:11812992, ECO:0000269 PubMed:15356110, ECO:0000269 PubMed:15528364, ECO:0000269 PubMed:23775590, ECO:0000269 PubMed:29100055}.</p>
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; Signal transduction; Stem cells
Gene Names	ITGAL
Clone No.	2B2
Image	



Western Blot

Positive WB detected in: THP-1 whole cell lysate

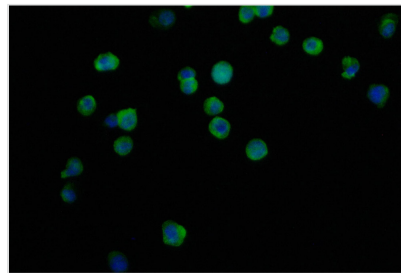
All lanes: ITGAL antibody at 1:2000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 129, 135, 120 kDa

Observed band size: 130 kDa



Immunofluorescence staining of THP-1 cell with CSB-RA787996A0HU at 1:50, 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 490-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).

Description

The ITGAL recombinant monoclonal antibody is created through a series of intricate procedures. Firstly, the ITGAL monoclonal antibody is harvested, and its gene sequence is analyzed. A vector with the ITGAL monoclonal antibody gene is then constructed and introduced into a host cell line for culture. The synthesized peptide from human ITGAL is used as an immunogen for the ITGAL monoclonal antibody production. The ITGAL recombinant monoclonal antibody is then purified via affinity chromatography, and its specificity is tested through ELISA, WB, and IF applications. It only reacts with human ITGAL protein.

ITGAL protein is a cell adhesion molecule that plays a key role in immune responses. It is primarily expressed on the surface of leukocytes, including T cells, B cells, monocytes, and granulocytes, and is responsible for mediating leukocyte adhesion and migration through interactions with ligands such as ICAM-1 and ICAM-2 on the surface of endothelial cells. This process is essential for immune cell recruitment to sites of inflammation and infection. Additionally, ITGAL is involved in the formation of immunological synapses between T cells and antigen-presenting cells, which is important for the activation of T cells and the initiation of an immune response.