

CD151 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP8751c**Specification**

CD151 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [P48509](#)**CD151 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 977**Other Names**

CD151 antigen, GP27, Membrane glycoprotein SFA-1, Platelet-endothelial tetraspan antigen 3, PETA-3, Tetraspanin-24, Tspan-24, CD151, CD151, TSPAN24

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP8751c](/products/AP8751c) was selected from the Center region of human CD151. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CD151 Antibody (Center) Blocking Peptide - Protein Information**Name** CD151**Synonyms** TSPAN24**Function**

Structural component of specialized membrane microdomains known as tetraspanin-enriched microdomains (TERMs), which act as platforms for receptor clustering and signaling. Plays a role in various cellular and molecular mechanism through its association with both integrin and non-integrin proteins. These interactions facilitate critical cellular functions, including cell-to-cell communication, wound healing, platelet aggregation, trafficking, cell motility, and angiogenesis (PubMed: [17045834](http://www.uniprot.org/citations/17045834), PubMed: [24723389](http://www.uniprot.org/citations/24723389), PubMed: [31488507](http://www.uniprot.org/citations/31488507)). Via interaction with JAM-A/F11R and integrin ITGA3:ITGB1, promotes the recruitment of signaling

molecules such as RAC1, CDC42 and RhoGTPases to facilitate the polarization of epithelial cells and the reorganization of the actin cytoskeleton, which are critical steps in cell migration process (PubMed:22843693, PubMed:35067832). Regulates the glycosylation pattern of ITGA3:ITGB1 thereby modulating its activity (PubMed:18852263). Plays an essential role in the maintenance of central laminin-binding integrin ITGA6:ITGB4-containing adhesion complexes (PubMed:31488507). Essential for the proper assembly of the glomerular and tubular basement membranes in kidney (PubMed:15265795). Contributes to T-cell activation by modulating integrin signaling leading to activation of downstream targets PTK2 and MAPK1/MAPK3 (PubMed:24723389).

Cellular Location

Cell membrane; Multi-pass membrane protein Note=Relocalizes to the immune synapse in T-cells upon activation

Tissue Location

Expressed in a variety of tissues including vascular endothelium and epidermis. Expressed on erythroid cells, with a higher level of expression in erythroid precursors than on mature erythrocytes (PubMed:15265795). Acts as a sensitive T-cell activation marker (PubMed:32978478).

CD151 Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

CD151 Antibody (Center) Blocking Peptide - Images

CD151 Antibody (Center) Blocking Peptide - Background

Essential for the proper assembly of the glomerular and tubular basement membranes in kidney.

CD151 Antibody (Center) Blocking Peptide - References

Karamatic Crew V.,et.al., Blood 104:2217-2223(2004).