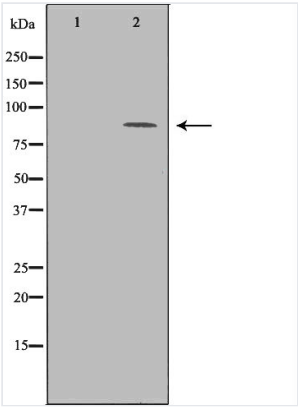
ITGB2 Antibody – Rabbit Polyclonal

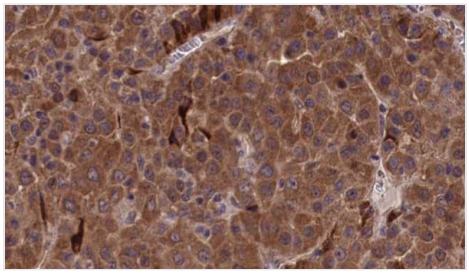
PRODUCT OVERVIEW

Product Name	ITGB2, Polyclonal Antibody
Full Product Name	ITGB2 Antibody
Product Gene Name	anti-ITGB2 antibody
Product Synonym Names	95 subunit beta; Beta 2 (antigen CD18 (p95); CD 18; CD18; Cell surface adhesion glycoprotein LFA 1/CR3/P150, 959 beta subunit precursor); Cell surface adhesion glycoproteins LFA 1/CR3/p150, 95 subunit beta; Cell surface adhesion glycoproteins LFA-1/CR3/p150; Complement component 3 receptor 3 and 4 subunit; Complement receptor C3 beta subunit; Complement receptor C3 subunit beta; Integrin beta 2; Integrin beta chain beta 2; Integrin beta-2 (ITGB2); Integrin beta-2; Integrin, beta 2 (complement component 3 receptor 3 and 4 subunit); ITB2_HUMAN; ITGB2; LAD; LCAMB; Leukocyte associated antigens CD18/11A, CD18/11B, CD18/11C; Leukocyte cell adhesion molecule CD18; LFA 1; LFA1; Lymphocyte function associated antigen 1 (LFA1); Lymphocyte function associated antigen 1; MAC 1; MAC1; Macrophage antigen 1 (mac1) beta; MF17; MFI7; OTTHUMP00000115278; OTTHUMP00000115279; OTTHUMP00000115280; OTTHUMP00000115281; OTTHUMP00000115282
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Concentration	1mg/ml (lot specific)
Specificity	ITGB2 antibody detects endogenous levels of total ITGB2
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.
Antibody/Peptide Pairs	ITGB2/CD18 peptide (MBS9626265) is used for blocking the activity of ITGB2/CD18 antibody (MBS9607549)
Molecular Weight	Observed: 85 kDa Predicted: 85 kDa
3D Structure	ModBase 3D Structure for P05107
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Immunogen	A synthesized peptide derived from human ITGB2
Subcellular Location	Membrane.
Tissue Specificity	Leukocytes (PubMed:23775590). Expressed in neutrophils (at protein level) (PubMed:21193407, PubMed:28807980).
Predicted Cross Reactivity	**Pig**
Similarity	Pig (82%)
Conjugation	Unconjugated
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.

Applications Tested/Suitable for anti-ITGB2 antibody	Western Blot (WB), Immunohistochemistry (IHC), ELISA (EIA)
Application Notes for anti-ITGB2 antibody	WB: 1:500-1:2000 IHC: 1:50-1:200
Related Product Information for anti-ITGB2 antibody	Description: In the immune system, integrins have essential roles in leukocyte trafficking and function. These include immune cell attachment to endothelial and antigen-presenting cells, cytotoxicity, and extravasation into tissues (1). Integrin adhesion receptors transduce signals that control complex cell functions which require the regulation of gene expression, such as proliferation, differentiation and survival. Their intracellular domain has no catalytic function, indicating that interaction with other transducing molecules is crucial for integrin-mediated signaling. JAB1 (Jun activation domain-binding protein 1), a coactivator of the c-Jun transcription factor, has been identified as a protein that interacts with the cytoplasmic domain of the beta2 subunit of the alphaL/beta2 integrin LFA-1 (2). Patients with leukocyte adhesion molecule (CD11/CD18, beta 2 integrins) deficiency have structural defects in the common beta subunit (CD18), which prevent heterodimer formation and normal cell surface expression of these receptors, leading to life-threatening bacterial infections (3). Function: Integrin ITGAL/ITGB2 is a receptor for ICAM1, ICAM2, ICAM3 and ICAM4. Integrins ITGAM/ITGB2 and ITGAX/ITGB2 are receptors for the iC3b fragment of the third complement component and for fibrinogen. Integrin ITGAX/ITGB2 recognizes the sequence G-P-R in fibrinogen alpha-chain. Integrin ITGAM/ITGB2 recognizes P1 and P2 peptides of fibrinogen gamma chain. Integrin ITGAM/ITGB2 is also a receptor for factor X. Integrin ITGAD/ITGB2 is a receptor for ICAM3 and VCAM1. Contributes to natural killer cell cytotoxicity (PubMed:15356110). Involved in leukocyte adhesion and transmigration of leukocytes including T-cells and neutrophils (PubMed:11812992, PubMed:28807980). Triggers neutrophil transmigration during lung injury through PTK2B/PYK2-mediated activation (PubMed:18587400). Integrin ITGAL/ITGB2 in association with ICAM3, contributes to apoptotic neutrophil phagocytosis by macrophages (PubMed:23775590). In association with alpha subunit ITGAM/CD11b, required for CD177-PRTN3-mediated activation of TNF primed neutrophils (PubMed:21193407). Subunit Structure: Heterodimer of an alpha and a beta subunit (PubMed:20033057). ITGB2 associates with either ITGAL, ITGAM, ITGAX or ITGAD. Found in a complex with CD177 and ITGAM/CD11b (PubMed:21193407, PubMed:28807980). Interacts with FGR (By similarity). Interacts with COPS5 and RANBP9 (PubMed:10766246, PubMed:14722085). Interacts with FLNA (via filamin repeats 4, 9, 12, 17, 19, 21, and 23) (PubMed:19828450). Interacts with THBD (PubMed:27055590). Post-translational Modifications: Both Ser-745 and Ser-756 become phosphorylated when T-cells are exposed to phorbol esters (PubMed:11700305). Phosphorylation on Thr-758 (but not on Ser-756) allows interaction with 14-3-3 proteins (PubMed:11700305, PubMed:16301335). Similarity: Belongs to the integrin beta chain family.
Other Notes	Small volumes of anti-ITGB2 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for ITGB2 purchase	MBS9607549 is an antibody targeting ITGB2. Also known as ITGB2 Antibody. Reactive in Human, Mouse, Rat. Host: Rabbit.



Western Blot (WB) of anti-ITGB2 antibody
Western blot analysis of extracts of K562, using ITGB2 antibody. The lane on the left is treated with the antigen-specific peptide.



Immunohistochemistry (IHC) of anti-ITGB2 antibody
MBS9607549 at 1/100 staining Human liver cancer tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for ITGB2. It may not necessarily be applicable to this product.

NCBI GI #	735367775
NCBI GeneID	3689
NCBI Accession #	NP_000202.3
UniProt Primary Accession #	P05107
UniProt Secondary Accession #	Q16418; Q53HS5; Q9UD72; B3KTS8; D3DSM1
UniProt Related Accession #	P05107
GenBank Nucleotide #	NM_000211.4
NCBI Official Full Name	integrin beta-2 isoform 1
NCBI Official Synonym Full Names	integrin subunit beta 2
NCBI Official Symbol	ITGB2
NCBI Official Synonym Symbols	LAD; CD18; MF17; MFI7; LCAMB; LFA-1; MAC-1
UniProt Protein Name	Integrin beta-2
UniProt Synonym Protein Names	Cell surface adhesion glycoproteins LFA-1/CR3/p150,95 subunit beta; Complement receptor C3 subunit beta; CD_antigen: CD18
Protein Family	Integrin
UniProt Gene Name	ITGB2
UniProt Synonym Gene Names	CD18; MFI7
NCBI Protein Information	integrin beta-2
NCBI Summary for ITGB2	This gene encodes an integrin beta chain, which combines with multiple different alpha chains to form different integrin heterodimers. Integrins are integral cell-surface proteins that participate in cell adhesion as well as cell-surface mediated signalling. The encoded protein plays an important role in immune response and defects in this gene cause leukocyte adhesion deficiency. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2014]
UniProt Comments for ITGB2	Integrin ITGAL/ITGB2 is a receptor for ICAM1, ICAM2, ICAM3 and ICAM4. Integrins ITGAM/ITGB2 and ITGAX/ITGB2 are receptors for the iC3b fragment of the third complement component and for fibrinogen. Integrin ITGAX/ITGB2 recognizes the sequence G-P-R in fibrinogen alpha-chain. Integrin ITGAM/ITGB2 recognizes P1 and P2 peptides of fibrinogen gamma chain. Integrin ITGAM/ITGB2 is also a receptor for factor X. Integrin ITGAD/ITGB2 is a receptor for ICAM3 and VCAM1. Contributes to natural killer cell cytotoxicity (PubMed:15356110). Involved in leukocyte adhesion and transmigration of leukocytes including T-cells and neutrophils (PubMed:11812992, PubMed:28807980). Triggers neutrophil transmigration during lung injury through PTK2B/PYK2-mediated activation (PubMed:18587400). Integrin ITGAL/ITGB2 in association with ICAM3, contributes to apoptotic neutrophil phagocytosis by macrophages (PubMed:23775590). In association with alpha subunit ITGAM/CD11b, required for CD177-PRTN3-mediated activation of TNF primed neutrophils (PubMed:21193407).
Research Articles on ITGB2	**1.** LncRNA ITGB2-AS1 could promote the migration and invasion of breast cancer cells by up-regulating ITGB2.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.

Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-mouse-rat-antibody/itgb2/9607549