

Integrin α 4 Polyclonal Antibody
Catalog # AP73431**Specification****Integrin α 4 Polyclonal Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	P13612
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

Integrin α 4 Polyclonal Antibody - Additional Information**Gene ID** 3676**Other Names**

ITGA4; CD49D; Integrin alpha-4; CD49 antigen-like family member D; Integrin alpha-IV; VLA-4 subunit alpha; CD49d

Dilution

WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. Not yet tested in other applications.

IHC-P~~N/A

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

Integrin α 4 Polyclonal Antibody - Protein Information**Name** ITGA4**Synonyms** CD49D**Function**

Integrins alpha-4/beta-1 (VLA-4) and alpha-4/beta-7 are receptors for fibronectin. They recognize one or more domains within the alternatively spliced CS-1 and CS-5 regions of fibronectin. They are also receptors for VCAM1. Integrin alpha-4/beta-1 recognizes the sequence Q-I-D-S in VCAM1. Integrin alpha-4/beta-7 is also a receptor for MADCAM1. It recognizes the sequence L-D-T in MADCAM1. On activated endothelial cells integrin VLA-4 triggers homotypic aggregation for most VLA-4-positive leukocyte cell lines. It may also participate in cytolytic T-cell interactions with target cells. ITGA4:ITGB1 binds to fractalkine (CX3CL1) and may act as its coreceptor in CX3CR1-dependent fractalkine signaling (PubMed:23125415). ITGA4:ITGB1 binds to PLA2G2A via a site (site 2) which is distinct from the classical ligand-binding site (site 1) and this induces integrin conformational changes and enhanced ligand binding to site 1

(PubMed:18635536, PubMed:25398877). Integrin ITGA4:ITGB1 represses PRKCA-mediated L-type voltage-gated channel Ca(2+) influx and ROCK-mediated calcium sensitivity in vascular smooth muscle cells via its interaction with SVEP1, thereby inhibiting vasocontraction (PubMed:35802072).

Cellular Location

Membrane; Single-pass type I membrane protein

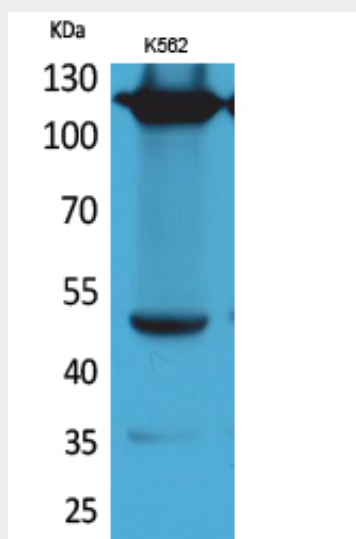
Tissue Location

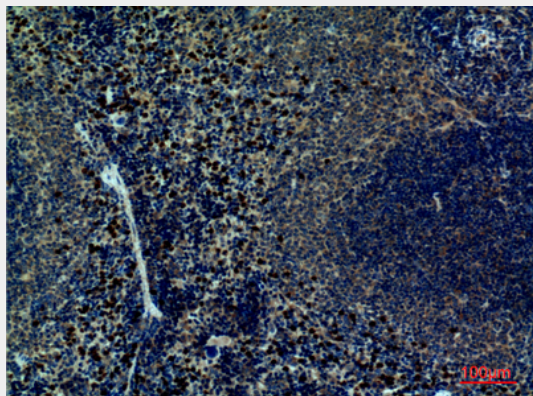
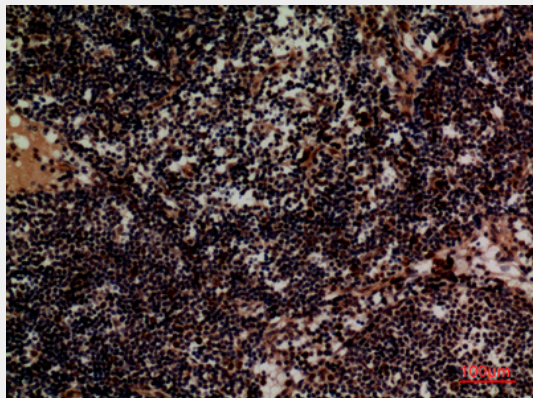
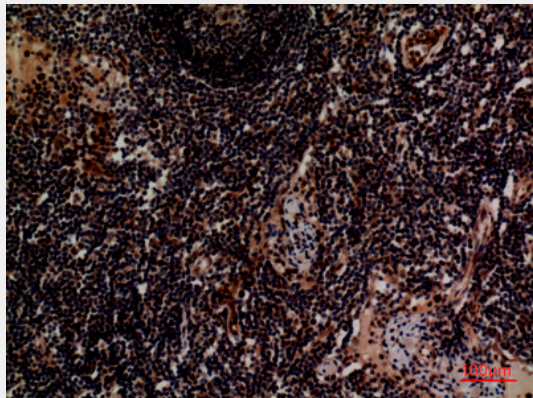
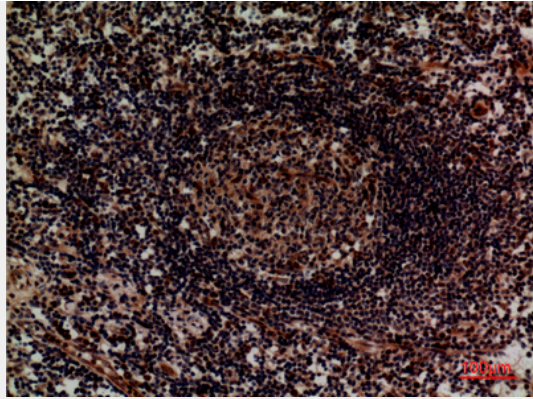
Expressed in vascular smooth muscle cells (at protein level).

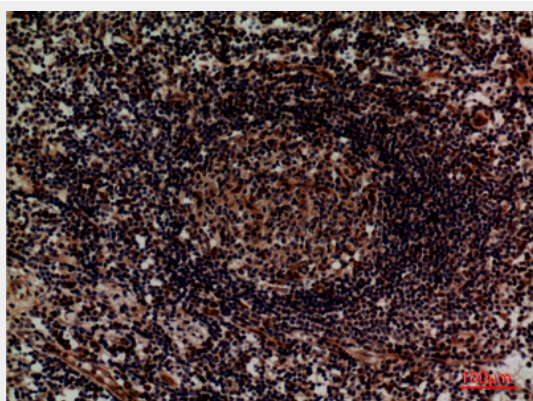
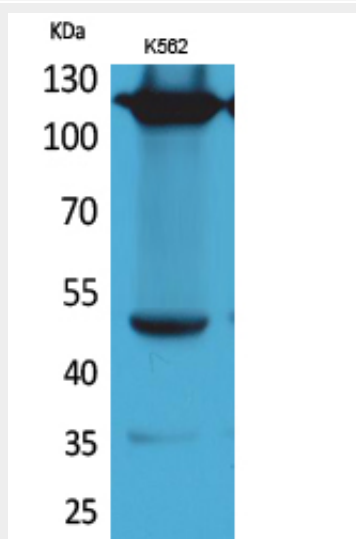
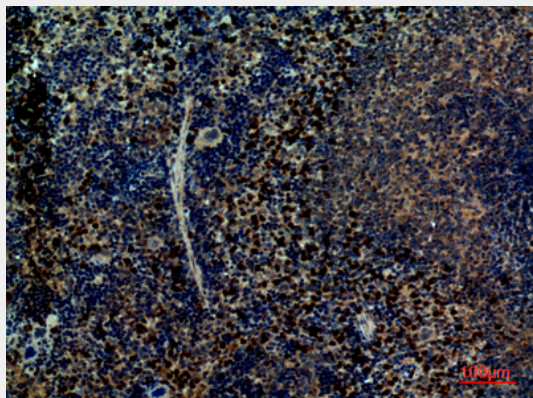
Integrin α 4 Polyclonal Antibody - Protocols

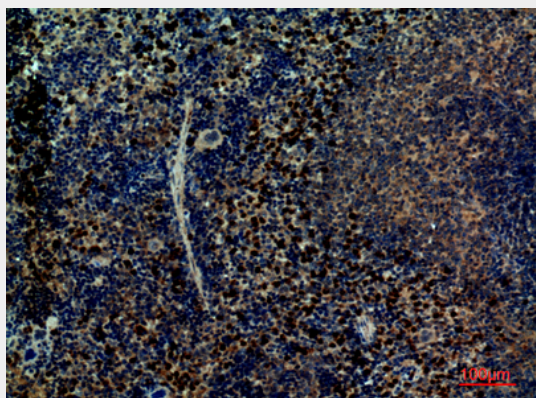
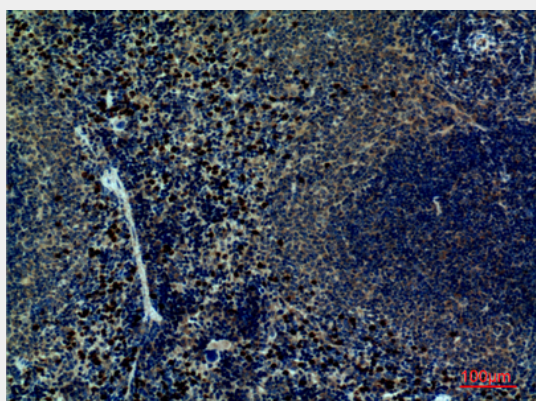
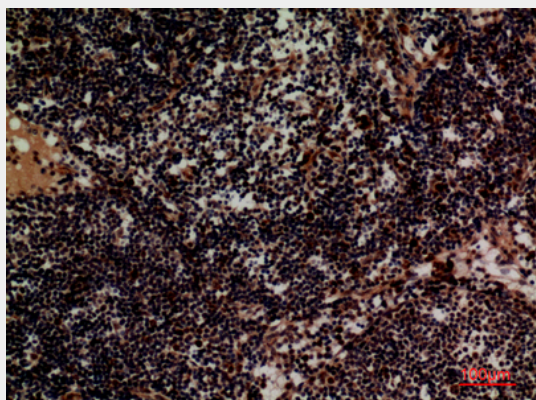
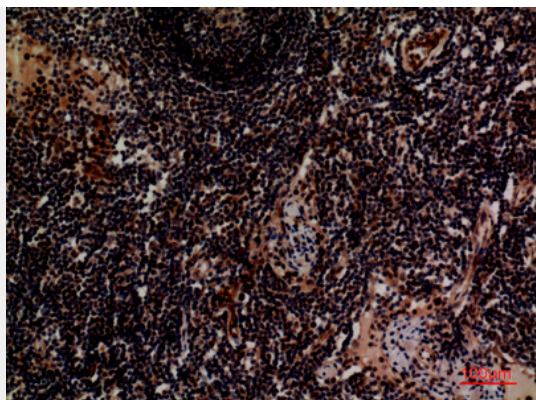
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Integrin α 4 Polyclonal Antibody - Images







Integrin α 4 Polyclonal Antibody - Background

Integrins α 4/ β 1 (VLA-4) and α 4/ β 7 are receptors for fibronectin. They recognize one or more domains within the alternatively spliced CS-1 and CS-5 regions of fibronectin. They are also receptors for VCAM1. Integrin α 4/ β 1 recognizes the sequence Q-I-D-S in VCAM1. Integrin α 4/ β 7 is also a receptor for MADCAM1. It recognizes the sequence L-D-T in MADCAM1. On activated endothelial cells integrin VLA-4 triggers homotypic aggregation for most VLA-4-positive leukocyte cell lines. It may also participate in cytolytic T-cell interactions with target cells. ITGA4:ITGB1 binds to fractalkine (CX3CL1) and may act as its coreceptor in CX3CR1-dependent fractalkine signaling (PubMed:23125415). ITGA4:ITGB1 binds to PLA2G2A via a site (site 2) which is distinct from the classical ligand-binding site (site 1) and this induces integrin conformational changes and enhanced ligand binding to site 1 (PubMed:18635536, PubMed:25398877).