S1P1 Antibody

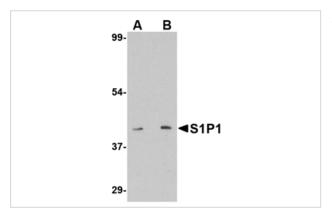
Catalog No: #24760



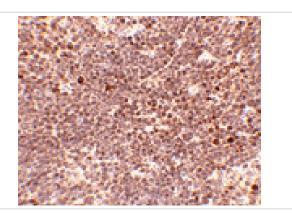
Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

Description	Support: tech@signalwayantibody.com
Product Name	S1P1 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Affinity chromatography purified via peptide column
Applications	ELISA WB IHC
Species Reactivity	Hu Ms Rt
Specificity	At least two isoforms of S1P1 are known to exist; this S1P1 antibody will only recognize the shorter isoform.
Immunogen Type	Peptide
Immunogen Description	Raised against a 14 amino acid peptide near the carboxy terminus of the human S1P1.
Target Name	S1P1
Other Names	Sphingosine-1-phosphate receptor 1, S1PR1, EDG1, ECGF1
Accession No.	Swiss-Prot:P21453Gene ID:1901
Uniprot	P21453
GeneID	1901;
Concentration	1mg/ml
Formulation	Supplied in PBS containing 0.02% sodium azide.
Storage	Can be stored at -20°C, stable for one year. As with all antibodies care should be taken to avoid repeated
	freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Images



Western blot analysis of S1P1 in mouse thymus lysate with S1P1 antibody at (A) 1 and (B) 2 ug/mL.



Immunohistochemistry of S1P1 in mouse thymus tissue with S1P1 antibody at 5 ug/mL.

Background

Movement of lymphocytes through lymphoid organs is required for generating immunity. Their migration into lymph nodes follows a series of events including integrin activation through chemokine signaling, adhesion and diapedis. The release of lymphocytes from lymph nodes is regulated by the phospholipid sphingosine-1-phosphate (S1P). One of its receptors S1P1 binds S1P with high specificity and affinity; agonism of this receptor by the immunosuppressive agent FTY720 inhibits the entry of tissue T cells into afferent lymphatics in homeostatic and inflammatory conditions. Recent experiments have indicated that CCR7-deficient T cells left lymph nodes more rapidly than wild-type cells did and these cells where also less effectively retained after treatment with FTY720, and that egress competence could be restored by inactivating G alpha i-protein-coupled receptor signaling. These results suggest that S1P1 acts in the lymphocyte to promote lymph node egress by overcoming retention signals mediated by CCR7 and G alpha i-protein-coupled receptor signaling.

Note: This product is for in vitro research use only