

# Product datasheet

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# ARG42224 anti-CD43 antibody [4I3]

Package: 50 μg Store at: -20°C

# Summary

Product Description Mouse Monoclonal antibody [413] recognizes CD43

Tested Reactivity Hu, Ms, Rat

Tested Application FACS, IHC-P, WB

Host Mouse

Clonality Monoclonal

Clone 413

Isotype IgG

Target Name CD43

Species Human

Immunogen Recombinant protein corresponding to A272-P400 of Human CD43.

Conjugation Un-conjugated

Alternate Names LSN; CD43; GALGP; GPL115

# **Application Instructions**

Application table	Application	Dilution
	FACS	1:150 - 1:500
	IHC-P	1:200 - 1:1000
	WB	1:500 - 1:2000
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min.  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 115 kDa	

# **Properties**

Form Liquid

Purification Affinity purification with immunogen.

Buffer 0.2% Na2HPO4, 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.

Preservative 0.05% Sodium azide

Stabilizer 4% Trehalose

Concentration 0.5 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol

SPN

Gene Full Name

sialophorin

Background

This gene encodes a highly sialylated glycoprotein that functions in antigen-specific activation of T cells, and is found on the surface of thymocytes, T lymphocytes, monocytes, granulocytes, and some B lymphocytes. It contains a mucin-like extracellular domain, a transmembrane region and a carboxyterminal intracellular region. The extracellular domain has a high proportion of serine and threonine residues, allowing extensive O-glycosylation, and has one potential N-glycosylation site, while the carboxy-terminal region has potential phosphorylation sites that may mediate transduction of activation signals. Different glycoforms of this protein have been described. In stimulated immune cells, proteolytic cleavage of the extracellular domain occurs in some cell types, releasing a soluble extracellular fragment. Defects in expression of this gene are associated with Wiskott-Aldrich syndrome. [provided by RefSeq, Sep 2017]

**Function** 

Predominant cell surface sialoprotein of leukocytes which regulates multiple T-cell functions, including T-cell activation, proliferation, differentiation, trafficking and migration. Positively regulates T-cell trafficking to lymph-nodes via its association with ERM proteins (EZR, RDX and MSN) (By similarity). Negatively regulates Th2 cell differentiation and predisposes the differentiation of T-cells towards a Th1 lineage commitment. Promotes the expression of IFN-gamma by T-cells during T-cell receptor (TCR) activation of naive cells and induces the expression of IFN-gamma by CD4+ T-cells and to a lesser extent by CD8+ T-cells (PubMed:18036228). Plays a role in preparing T-cells for cytokine sensing and differentiation into effector cells by inducing the expression of cytokine receptors IFNGR and IL4R, promoting IFNGR and IL4R signaling and by mediating the clustering of IFNGR with TCR (PubMed:24328034). Acts as a major E-selectin ligand responsible for Th17 cell rolling on activated vasculature and recruitment during inflammation. Mediates Th17 cells, but not Th1 cells, adhesion to E-selectin. Acts as a T-cell counter-receptor for SIGLEC1. [UniProt]

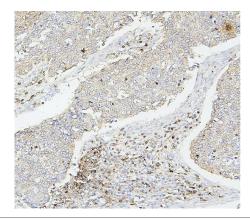
Calculated Mw

40 kDa

Cellular Localization

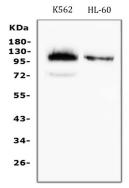
Membrane; Single-pass type I membrane protein. Cell projection, microvillus. Cell projection, uropodium. Note=Localizes to the uropodium and microvilli via its interaction with ERM proteins (EZR, RDX and MSN). CD43 cytoplasmic tail: Nucleus. Nucleus, PML body. [UniProt]

### **Images**



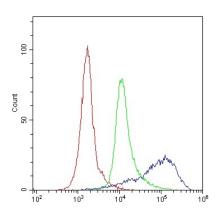
#### ARG42224 anti-CD43 antibody [4I3] IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42224 anti-CD43 antibody [413] at 1  $\mu g/ml$  dilution, overnight at 4°C.



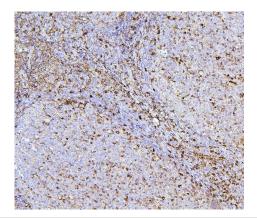
#### ARG42224 anti-CD43 antibody [413] WB image

Western blot:  $50~\mu g$  of samples under reducing conditions. K562 and HL-60 whole cell lysates stained with ARG42224 anti-CD43 antibody [4l3] at  $0.5~\mu g/ml$  dilution, overnight at  $4^{\circ}C$ .



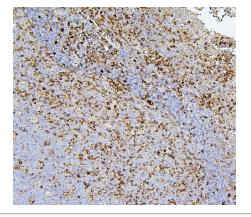
#### ARG42224 anti-CD43 antibody [4I3] FACS image

Flow Cytometry: Human PBMC cells were blocked with 10% normal goat serum and then stained with ARG42224 anti-CD43 antibody [4I3] (blue line) at 1  $\mu$ g/10^6 cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green line) was Mouse IgG (1  $\mu$ g/10^6 cells) used under the same conditions. Unlabelled sample (red line) was also used as a control.



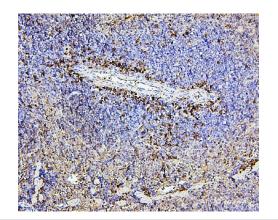
#### ARG42224 anti-CD43 antibody [4I3] IHC-P image

Immunohistochemistry: Paraffin-embedded Human tonsil tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42224 anti-CD43 antibody [4I3] at 1  $\mu g/ml$  dilution, overnight at 4°C.



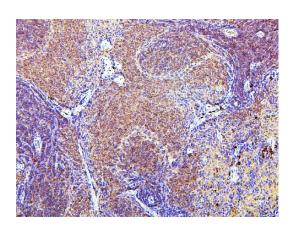
# ARG42224 anti-CD43 antibody [4I3] IHC-P image

Immunohistochemistry: Paraffin-embedded Human tonsil tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42224 anti-CD43 antibody [4I3] at 1  $\mu g/ml$  dilution, overnight at 4°C.



#### ARG42224 anti-CD43 antibody [4I3] IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse spleen tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42224 anti-CD43 antibody [4I3] at 1  $\mu g/ml$  dilution, overnight at 4°C.



#### ARG42224 anti-CD43 antibody [4I3] IHC-P image

Immunohistochemistry: Paraffin-embedded Rat spleen tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42224 anti-CD43 antibody [4I3] at 1  $\mu g/ml$  dilution, overnight at 4°C.