

ARG52786
anti-CD45 antibody [SPM496]Package: 500 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [SPM496] recognizes CD45/T200/LCA
Tested Reactivity	Hu
Tested Application	IHC-P
Host	Mouse
Clonality	Monoclonal
Clone	SPM496
Isotype	IgG1, kappa
Target Name	CD45
Species	Human
Immunogen	Stimulated human leucocytes.
Conjugation	Un-conjugated
Alternate Names	LY5; GP180; Receptor-type tyrosine-protein phosphatase C; CD45; L-CA; CD antigen CD45; Leukocyte common antigen; CD45R; LCA; T200; EC 3.1.3.48; B220

Application Instructions

Application table	Application	Dilution
	IHC-P	1:100
Application Note	IHC-P: Antigen Retrieval: Boil tissue section in 10mM citrate buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min. Incubation Time: 30 min at RT. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Tonsil	

Properties

Form	Liquid
Buffer	Tissue culture supernatant in TBS (pH 7.5), 1% BSA and < 0.1% Sodium azide
Preservative	< 0.1% Sodium azide
Stabilizer	1% BSA
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

Database links

[GeneID: 5788 Human](#)

[Swiss-port # P08575 Human](#)

Background

CD45 is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitosis, and oncogenic transformation. This PTP contains an extracellular domain, a single transmembrane segment and two tandem intracytoplasmic catalytic domains, and thus is classified as a receptor type PTP. This PTP has been shown to be an essential regulator of T- and B-cell antigen receptor signaling. It functions through either direct interaction with components of the antigen receptor complexes, or by activating various Src family kinases required for the antigen receptor signaling. This PTP also suppresses JAK kinases, and thus functions as a regulator of cytokine receptor signaling. Alternatively spliced transcripts variants of this gene, which encode distinct isoforms, have been reported. [provided by RefSeq, Jun 2012]

Function

CD45: Protein tyrosine-protein phosphatase required for T-cell activation through the antigen receptor. Acts as a positive regulator of T-cell coactivation upon binding to DPP4. The first PTPase domain has enzymatic activity, while the second one seems to affect the substrate specificity of the first one. Upon T-cell activation, recruits and dephosphorylates SKAP1 and FYN. Dephosphorylates LYN, and thereby modulates LYN activity.

(Microbial infection) Acts as a receptor for human cytomegalovirus protein UL11 and mediates binding of UL11 to T-cells, leading to reduced induction of tyrosine phosphorylation of multiple signaling proteins upon T-cell receptor stimulation and impaired T-cell proliferation. [UniProt]

Highlight

Related products:

[CD45 antibodies](#); [CD45 Duos / Panels](#); [Anti-Mouse IgG secondary antibodies](#);

Related news:

[Lymphoma](#)

Research Area

Developmental Biology antibody; Immune System antibody; Neuroscience antibody; Signaling Transduction antibody; Mouse Inflammatory Cell Marker antibody; B Cell Marker antibody

Calculated Mw

147 kDa

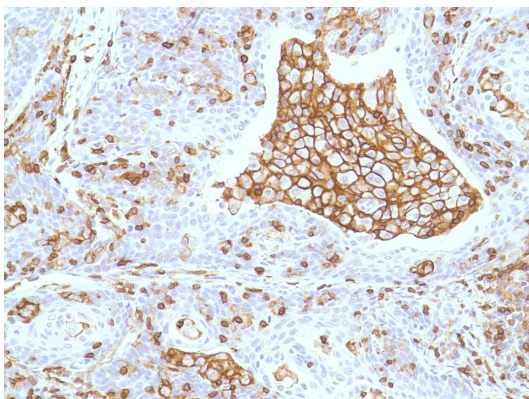
PTM

Heavily N- and O-glycosylated.

Cellular Localization

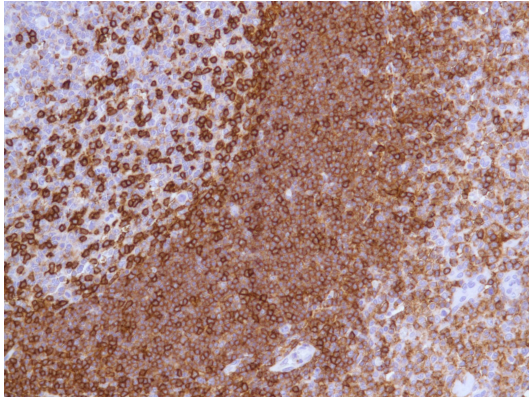
Membrane

Images



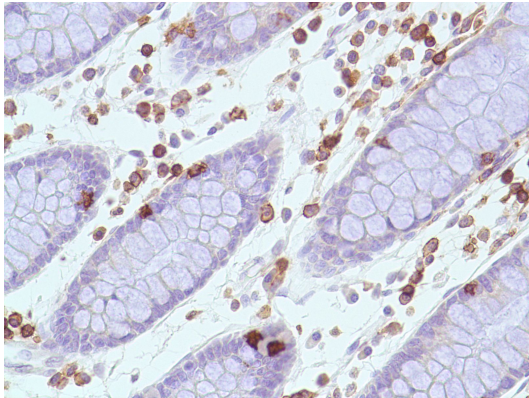
ARG52786 anti-CD45/T200/LCA antibody [SPM496] IHC-P image

Immunohistochemistry: Human Cervical Squamous Cell Carcinoma stained with CD45/T200/LCA antibody [SPM496] (ARG52786)



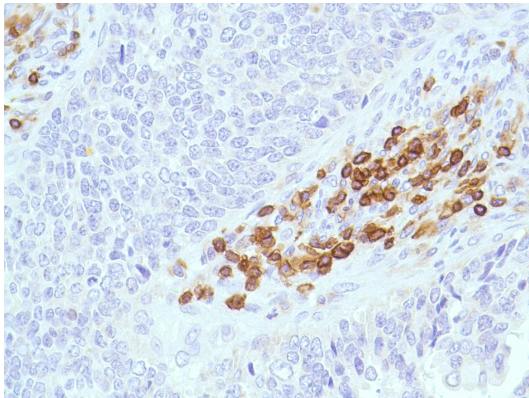
ARG52786 anti-CD45/T200/LCA antibody [SPM496] IHC-P image

Immunohistochemistry: Human Tonsil stained with CD45/T200/LCA antibody [SPM496] (ARG52786)



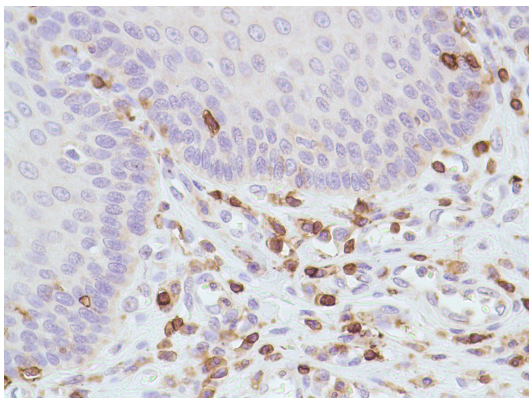
ARG52786 anti-CD45/T200/LCA antibody [SPM496] IHC-P image

Immunohistochemistry: Human Colon stained with CD45/T200/LCA antibody [SPM496] (ARG52786)



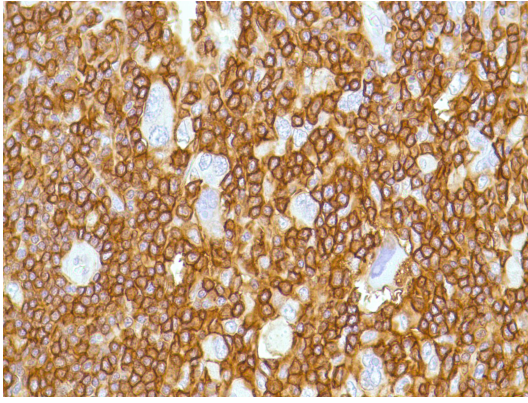
ARG52786 anti-CD45/T200/LCA antibody [SPM496] IHC-P image

Immunohistochemistry: Human Endometrial Adenocarcinoma stained with CD45/T200/LCA antibody [SPM496] (ARG52786)



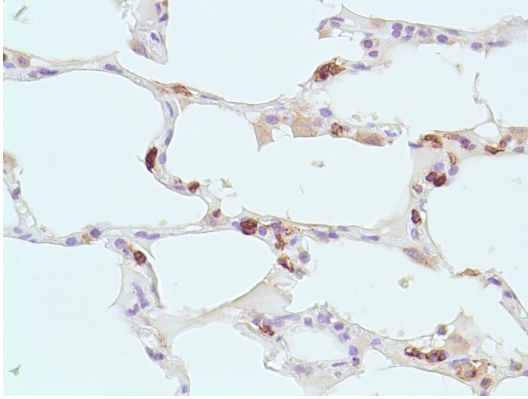
ARG52786 anti-CD45/T200/LCA antibody [SPM496] IHC-P image

Immunohistochemistry: Human Esophagus stained with CD45/T200/LCA antibody [SPM496] (ARG52786)



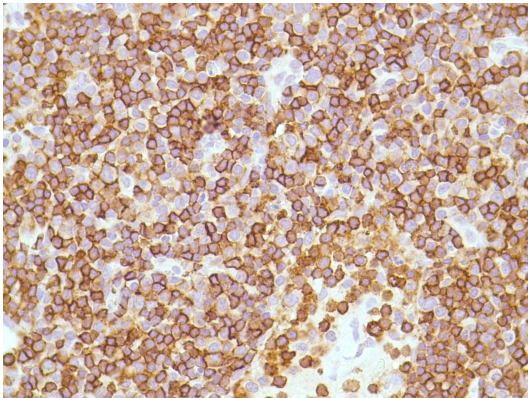
ARG52786 anti-CD45/T200/LCA antibody [SPM496] IHC-P image

Immunohistochemistry: Human HK Lymphoma stained with CD45/T200/LCA antibody [SPM496] (ARG52786)



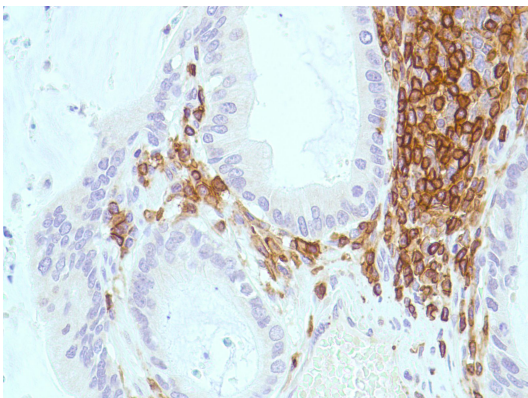
ARG52786 anti-CD45/T200/LCA antibody [SPM496] IHC-P image

Immunohistochemistry: Human Lung stained with CD45/T200/LCA antibody [SPM496] (ARG52786)



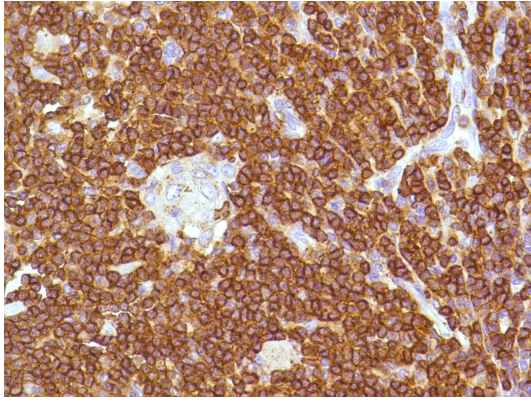
ARG52786 anti-CD45/T200/LCA antibody [SPM496] IHC-P image

Immunohistochemistry: Human Reactive Lymph Node stained with CD45/T200/LCA antibody [SPM496] (ARG52786)



ARG52786 anti-CD45/T200/LCA antibody [SPM496] IHC-P image

Immunohistochemistry: Human Stomach Adenocarcinoma stained with CD45/T200/LCA antibody [SPM496] (ARG52786)



ARG52786 anti-CD45/T200/LCA antibody [SPM496] IHC-P image

Immunohistochemistry: Human Thymus stained with
CD45/T200/LCA antibody [SPM496] (ARG52786)
