## FITC Conjugated Anti-Human CD45 Antibody [PSH03-64] HA600112F

phosphatase (PTP) family. PTPs are signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. CD45 contains an extracellular domain, a single transmembrane segment, and two tandem intracytoplasmic catalytic domains, and thus belongs to the receptor type PTP family. CD45 is a type I transmembrane protein that is present in various isoforms on all differentiated hematopoietic cells (except erythrocytes and plasma cells). CD45 has been shown to be an essential regulator of T- and B-cell antigen receptor signalling. It functions through either direct interaction with components of the antigen receptor complexes via its extracellular domain (a form of co-stimulation), or by activating various Src family kinases required for the antigen receptor signaling via its cytoplasmic domain. CD45 also suppresses JAK kinases and so functions as a negative regulator of cytokine receptor signaling. Many alternatively spliced transcripts variants of this gene, which encode distinct isoforms, have been reported. Antibodies against the different isoforms of CD45 are used in routine immunohistochemistry		
Applications:     FC       Molecular WI:     Predicted band size: 147 kDa       Clone number:     PSH03-64       Description:     The protein product of this gene, best known as CD45, is a member of the protein tyrosine phosphatase (PTP) family. PTPs are signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. CD45 contains an extracellular domain, a single transmembrane segment, and two tandern intracytoplasmic catalytic domains, and thus belongs to the receptor type PTP family. CD45 is a type I transmembrane protein that is present in various isoforms on all differentiated hematopoietic cells (except erythrocytes and plasma cells). CD45 has been shown to be are essential regulator of T- and B-cell antigen receptor signalling. It functions through either direct interaction with components of the antigen receptor signaling. Many alternatively spliced transcripts variants of this gene, which encode distinct isoforms, have been reported Antibodies against the different isoforms of CD45 are used in routine immunohistochemistry to differentiate between immune cell types, as well as to differentiate between histologica sections from lymphomas and carcinomas.       Conjugate:     FITC-conjugated       Immunogen:     Synthetic peptide.       Positive control:     Raji.       Subcellular location:     Cell membrane, Membrane raft.       Database links:     SwissProt: P08575 Human       Recommended Dilutions:     FC       FC     1:1,000       Storage Instruction: <t< th=""><th></th><th></th></t<>		
Molecular Wt:     Predicted band size: 147 kDa       Clone number:     PSH03-64       Description:     The protein product of this gene, best known as CD45, is a member of the protein tyrosine phosphatase (PTP) family. PTPs are signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. CD45 contains an extracellular domain, a single transmembrane segment, and two tandem intracytoplasmic catalytic domains, and thus belongs to the receptor type PTP family. CD45 is a type I transmembrane protein that is present in various isoforms on all differentiate hematopoletic cells (except erythrocytes and plasma cells). CD45 has been shown to be are essential regulator of T- and B-cell antigen receptor signalling. It functions through either direct interaction with components of the antigen receptor signalling. Many alternatively spliced transcripts variants of this gene, which encode distinct isoforms, have been reported. Antibodies against the different isoforms of CD45 are used in routine immunohistochemistry to differentiate between immune cell types, as well as to differentiate between histologica sections from lymphomas and carcinomas.       Conjugate:     FITC-conjugated       Immunogen:     Synthetic peptide.       Positive control:     Raji.       Subcellular location:     Cell membrane raft.       Database links:     SwissProt: P08575 Human       Recommended Dilutions:     FC     1:1,000       Storage Instruction:     Slore at +4 °C after thawing. Aliquot store at -20 °C. Avoid repeated freeze / thaw cycles. </th <th></th> <th></th>		
Clone number:       PSH03-64         Description:       The protein product of this gene, best known as CD45, is a member of the protein tyrosine phosphatase (PTP) family. PTPs are signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. CD45 contains an extracellular domain, a single transmembrane segment, and two tandem intracytoplasmic catalytic domains, and thus belongs to the receptor type PTP family. CD45 is a type I transmembrane protein that is present in various isoforms on all differentiate hematopoietic cells (except erythrocytes and plasma cells). CD45 has been shown to be are essential regulator of T- and B-cell antigen receptor signalling. It functions through either direct interaction with components of the antigen receptor signalling. It functions through either direct interaction with components of trooptoxino. CD45 also suppresses JAK kinases and so functions as a negative regulator of cytokine receptor signalling. Many alternatively spliced transcripts variants of this gene, which encode distinct isoforms, have been reported Antibodies against the different isoforms of CD45 are used in routine immunohistochemistry to differentiate between immune cell types, as well as to differentiate between histologica sections from lymphomas and carcinomas.         Conjugate:       FITC-conjugated         Immunogen:       Synthetic peptide.         Positive control:       Raji.         Subcellular location:       Cell membrane, Membrane raft.         Database links:       SwissProt: P08575 Human         Recommended Dilutions:       Preservative: 0.02% Sodium azide Constituents: 30% Glycerol, 1% BSA, 68.98% PBS. </th <th></th> <th></th>		
Description:     The protein product of this gene, best known as CD45, is a member of the protein tyrosine phosphatase (PTP) family. PTPs are signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. CD45 contains an extracellular domain, a single transmembrane segment, and two tandem intracytoplasmic catalytic domains, and thus belongs to the receptor type PTP family. CD45 is a type I transmembrane protein that is present in various isoforms on all differentiated hematopoietic cells (except erythrocytes and plasma cells). CD45 has been shown to be ar essential regulator of T- and B-cell antigen receptor complexes via its extracellular domain (a form of co-stimulation), or by activating various Src family kinases required for the antigen receptor signaling. It functions through either direct interaction with components of the antigen receptor signaling. Many alternatively spliced transcripts variants of this gene, which encode distinct isoforms, have been reported. Antibodies against the different isoforms of CD45 are used in routine immunohistochemistry to differentiate between immune cell types, as well as to differentiate between histologica sections from lymphomas and carcinomas.       Conjugate:     FITC-conjugated       Immunogen:     Synthetic peptide.       Positive control:     Raji.       Subcellular location:     Cell membrane raft.       Database links:     SwissProt: P08575 Human       Recommended Dilutions:     FC     1:1,000       Storage lustruction:     Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.		
phosphatase (PTP) family. PTPs are signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. CD45 contains an extracellular domain, a single transmembrane segment, and two tander intracytoplasmic catalytic domains, and thus belongs to the receptor type PTP family. CD45 is a type I transmembrane protein that is present in various isoforms on all differentiated hematopoietic cells (except erythrocytes and plasma cells). CD45 has been shown to be ar essential regulator of T- and B-cell antigen receptor signalling. It functions through either direct interaction with components of the antigen receptor complexes via its extracellular domain (a form of co-stimulation), or by activating various Src family kinases required for the antigen receptor signaling via its cytoplasmic domain. CD45 also suppresses JAK kinases, and so functions as a negative regulator of cytokine receptor signaling. Many alternatively spliced transcripts variants of this gene, which encode distinct isoforms, have been reported. Antibodies against the different isoforms of CD45 are used in routine immunohistochemistry to differentiate between immune cell types, as well as to differentiate between histologica sections from lymphomas and carcinomas.Conjugate:FITC-conjugatedImmunogen:Synthetic peptide.Positive control:Raji.Subcellular location:Cell membrane raft.Database links:SwissProt: P08575 HumanRecommended Dilutions: FCPreservative: 0.02% Sodium azide Constituents: 30% Glycerol, 1% BSA, 68.98% PBS.Storage Instruction:Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.		F 31103-04
Immunogen:Synthetic peptide.Positive control:Raji.Subcellular location:Cell membrane, Membrane raft.Database links:SwissProt: P08575 HumanRecommended Dilutions:Image: Protect to the state to the st	Description:	The protein product of this gene, best known as CD45, is a member of the protein tyrosine phosphatase (PTP) family. PTPs are signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. CD45 contains an extracellular domain, a single transmembrane segment, and two tandem intracytoplasmic catalytic domains, and thus belongs to the receptor type PTP family. CD45 is a type I transmembrane protein that is present in various isoforms on all differentiated hematopoietic cells (except erythrocytes and plasma cells). CD45 has been shown to be an essential regulator of T- and B-cell antigen receptor signalling. It functions through either direct interaction with components of the antigen receptor complexes via its extracellular domain (a form of co-stimulation), or by activating various Src family kinases required for the antigen receptor signaling. Many alternatively spliced transcripts variants of this gene, which encode distinct isoforms, have been reported. Antibodies against the different isoforms of CD45 are used in routine immunohistochemistry to differentiate between immune cell types, as well as to differentiate between histological sections from lymphomas and carcinomas.
Positive control:Raji.Subcellular location:Cell membrane, Membrane raft.Database links:SwissProt: P08575 HumanRecommended Dilutions:I:1,000FC1:1,000Storage Buffer:Preservative: 0.02% Sodium azide Constituents: 30% Glycerol, 1% BSA, 68.98% PBS.Storage Instruction:Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.	Conjugate:	FITC-conjugated
Subcellular location:Cell membrane, Membrane raft.Database links:SwissProt: P08575 HumanRecommended Dilutions:IFC1:1,000Storage Buffer:Preservative: 0.02% Sodium azide Constituents: 30% Glycerol, 1% BSA, 68.98% PBS.Storage Instruction:Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.	lmmunogen:	Synthetic peptide.
Database links:SwissProt: P08575 HumanRecommended Dilutions:I:1,000Storage Buffer:Preservative: 0.02% Sodium azide Constituents: 30% Glycerol, 1% BSA, 68.98% PBS.Storage Instruction:Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.	Positive control:	Raji.
Recommended Dilutions: FC1:1,000Storage Buffer:Preservative: 0.02% Sodium azide Constituents: 30% Glycerol, 1% BSA, 68.98% PBS.Storage Instruction:Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.	Subcellular location:	Cell membrane, Membrane raft.
FC1:1,000Storage Buffer:Preservative: 0.02% Sodium azide Constituents: 30% Glycerol, 1% BSA, 68.98% PBS.Storage Instruction:Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.	Database links:	SwissProt: P08575 Human
<b>Storage Instruction:</b> Store at +4 $^{\circ}$ C after thawing. Aliquot store at -20 $^{\circ}$ C. Avoid repeated freeze / thaw cycles.		1:1,000
	Storage Buffer:	Preservative: 0.02% Sodium azide Constituents: 30% Glycerol, 1% BSA, 68.98% PBS.
Purity: Protein A affinity purified.	Storage Instruction:	Store at +4 $^\circ\!\!\mathbb{C}$ after thawing. Aliquot store at -20 $^\circ\!\!\mathbb{C}$ . Avoid repeated freeze / thaw cycles.
	Purity:	Protein A affinity purified.

## Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn



Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

HA600112F - Page 2

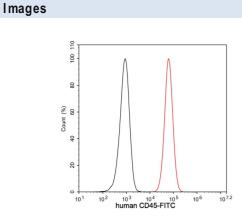


Fig1: Flow cytometric analysis of Raji cells labeling Human CD45.

Cells were washed twice with cold PBS and resuspend. Then incubated for 1 hour at +4 $^{\circ}$ C with Human CD45 (HA600112F, red, 1µg/mL). Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

## **Background References**

- 1. Al Barashdi MA et al. Protein tyrosine phosphatase receptor type C (PTPRC or CD45). J Clin Pathol. 2021 Sep
- 2. Li Z et al. CD45: a niche marker for allotransplantation. Blood. 2022 Mar

## Hangzhou Huaan Biotechnology Co., Ltd.



Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Celt=Immunofluorescence (Celt) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation