CD45 Protein, Mouse (sf9, His-GST)

Cat. No.:	HY-P72915
Synonyms:	Receptor-type tyrosine-protein phosphatase C; L-CA; T200; PTPRC; CD45
Species:	Mouse
Source:	Sf9 insect cells
Accession:	AAA39458.1 (N453-S1152)
Gene ID:	19264
Molecular Weight:	Approximately 110 kDa

PROPERTIES

AA Sequence

N G K I Q R N G T A E K C N F H T K A D R P D K V N G M K T S R P T D N S I N V
T C G P P Y E T N G P K T F Y I L V V R S G G S F V T K Y N K T N C Q F Y V D N
L Y Y S T D Y E F L V S F H N G V Y E G D S V I R N E S T N F N A K A L I I F L
V F L I I V T S I A L L V V L Y K I Y D L R K K R S S N L D E Q Q E L V E R D D
E K Q L M D V E P I H S D I L L E T Y K R K I A D E G R L F L A E F Q S I P R V
F S K F P I K D A R K P H N Q N K N R Y V D I L P Y D Y N R V E L S E I N G D A
G S T Y I N A S Y I D G F K E P R K Y I A A Q G P R D E T V D D F W R M I W E Q
K A T V I V M V T R C E E G N R N K C A E Y W P S M E E G T R A F K D I V V T I
N D H K R C P D Y I I Q K L N V A H K K E K A T G R E V T H I Q F T S W P D H G
V P E D P H L L L K L R R R V N A F S N F F S G P I V V H C S A G V G R T G T Y
I G I D A M L E G L E A E G K V D V Y G Y V V K L R R Q R C L M V Q V E A Q Y I
L I H Q A L V E Y N Q F G E T E V N L S E L H S C L H N M K K R D P P S D P S P
L E A E Y Q R L P S Y R S W R T Q H I G N Q E E N K K K N R N S N V V P Y D F N
R V P L K H E L E M S K E S E P E S D E S S D D D S D S E E T S K Y I N A S F V
M S Y W K P E M M I A A Q G P L K E T I G D F W Q M I F Q R K V K V I V M L T E
L V N G D Q E V C A Q Y W G E G K Q T Y G D M E V E M K D T N R A S A Y T L R T
F E L R H S K R K E P R T V Y Q Y Q C T T W K G E E L P A E P K D L V S M I Q D
L K Q K L P K A S P E G M K Y H K H A S

Biological Activity	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Solution.
Formulation	Supplied as a 0.2 μm filtered solution of 20 mM Tris, 500 mM NaCl, 0.5 mM GSH, 3 mM DTT, pH 7.4, 10% gly
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	N/A
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.

Shipping	Shipping with dry ice.

DESCRIPTION

Background	Receptor-type tyrosine-protein phosphatase C (CD45), a member of the protein tyrosine phosphatase family, exhibits versatile functions, including heparan sulfate proteoglycan binding activity, heparin binding activity, and protein tyrosine phosphatase activity. It is intricately involved in key processes such as lymphocyte differentiation, positive regulation of macromolecule metabolic processes, and regulation of signal transduction. CD45 acts upstream in lymphocyte-related pathways, including differentiation and activation, while being prominently located in the external side of the plasma membrane, focal adhesion, and membrane raft. Widely expressed in various structures such as the 3rd branchial arch, alimentary system, cardiovascular system, hemolymphoid system, and placenta, CD45's significance is underscored by its association with conditions like systemic lupus erythematosus. The human ortholog of this gene, PTPRC (protein tyrosine phosphatase receptor type C), is implicated in hepatitis C, multiple sclerosis, and severe combined immunodeficiency, highlighting its pivotal role in immune-related disorders[1][2][3].

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