

## Product Data Sheet

## CD43 Protein, Rat (HEK293, Fc)

HY-P75403
Leukosialin; Ly-48; Sialophorin; CD43; CD43ct; SPN
Rat
HEK293
R9PXZ7 (Q21-G243)
24796
Approximately 95&57&50 kDa

PROPERTIES	
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 $\mu\text{g}/\text{mL}$ in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

## **DESCRIPTION Background** The CD43 protein stands out as the predominant cell surface sialoprotein of leukocytes, orchestrating a myriad of crucial functions in T-cell regulation. It exerts a positive influence on T-cell activation, proliferation, differentiation, trafficking, and migration, notably facilitating T-cell trafficking to lymph nodes through its association with ERM proteins (EZR, RDX, and MSN). While playing a role in preparing T-cells for cytokine sensing and differentiation into effector cells, CD43 negatively regulates Th2 cell differentiation and steers T-cells toward a Th1 lineage commitment. Additionally, it plays a pivotal role in inducing the expression of IFN-gamma by T-cells during T-cell receptor (TCR) activation, promoting IFNGR and IL4R signaling, and mediating the clustering of IFNGR with TCR. Acting as a major E-selectin ligand, CD43 facilitates Th17 cell rolling on activated vasculature and recruitment during inflammation, mediating Th17 cell adhesion to E-selectin. Moreover, CD43 serves as a T-cell counter-receptor for SIGLEC1, contributing to cell survival by protecting cells from apoptotic signals.

## Caution: Product has not been fully validated for medical applications. For research use only.

 Tel: 609-228-6898
 Fax: 609-228-5909
 E-mail: tech@MedChemExpress.com

 Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA