CD26/Dipeptidyl Peptidase 4 Protein, Cynomolgus (HEK293, His)

Cat. No.:	HY-P76876
Synonyms:	Dipeptidyl peptidase 4; ADABP; ADCP-2; DPP IV; TP103; CD26; DPP4
Species:	Cynomolgus
Source:	HEK293
Accession:	F6VRB0 (D34-P766)
Gene ID:	654491
Molecular Weight:	Approximately 100-130 kDa due to the glycosylation.

PROPERTIES

AA Sequence	D A T A D S R K T Y T L T D Y L K N T Y R L K L Y S L R W I S D H E Y L Y K Q E N N I L V F N A E Y G N S S V F L E N S T F D E F G H S I N D Y S I S P D G Q F I L L E Y N Y V K Q W R H S Y T A S Y D I Y D L N K R Q L I T E E R I P N N T Q W V T W S P V G H K L A Y V W N N D I Y V K I E P N L P S H R I T S T G K E D M I Y N G I T D W V Y E E E V F S A Y S A L W W S P N G T F L A Y A Q F N D T E V P L I E Y S F Y S D E S L Q Y P K T V Q V P Y P K A G A V N P T V K F F V V N T D S L S S A T N A T S I Q I T A P A S M L I G D H Y L C D V T W A T Q E R I S L Q W L R R I Q N Y S V M D I C D Y D E S S G R W N C L V A R Q H I E T S T T G W V G R F R P S E P H F T S D G N S F Y K I I S N E E G Y R H I C Y F Q I N K K N C T F I T K G A W E V I G I E A L T S D Y L Y Y I S N E Y K G M P G G R N L Y K I Q L S D Y T K V T C L S C E L N P E R C Q Y Y S V S F S K E A K Y Y Q L R C S G P G L P L Y T L H S S V N D K G P R V L E D N S A L D K M L Q N V Q M P S K T L D F I I L N E T K F W Y Q M I L P P H F D K S K K Y P L L L D V Y A G P C S Q K A D A V F R L N W A T Y L A S T E N I I V A S F D G R G S G Y Q G D K I M H A I N R R L G T F E V E D Q I E A A R Q F S K M G F V D N K R I A I W G W S Y G G Y V T S M V L G S G S G V F K C G I A V A P V S R W E Y Y D S V Y T E R Y M G L P T P E D N L D H Y R N S T V M S R A E N F K Q V E Y L L I H G T A D D N V H F Q Q S A Q I S K A L V D A G V D F Q A M W Y T D E D H G I A S S T A H Q H I Y T H M S H F I K Q C F S L P
Biological Activity	Measured by its ability to cleave 10 μM fluorogenic peptide substrate, Gly-Pro-7-amido-4-methylcoumarin that incubate at room temperature in kinetic mode for 5 minutes. The specific activity is 3150.25 pmol/min/μg.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).

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	Dipeptidyl peptidase 4 (DPP4), also known as T cell surface antigen CD26, is a ubiquitous enzyme in human. It is widely expressed in a variety of tissues (lung, brain, pancreas, kidney, blood vessels, prostate, uterus, thymus, lymph nodes and spleen) and many cells (epithelial cells, inner skin cells, immune cells), especially highly expressed in kidney and small intestine. It is a transmembrane glycoprotein composed of 766 amino acids with a relative molecular weight of 110kDa. Its basic structure mainly includes: intracellular N-terminal region, transmembrane region and extracellular region. The extracellular part consists of a flexible rod, a glycosylation rich region (binding region with anti-CD26 antibody, adenosine deaminase (ADA) and caveolin-1), a cysteine rich region (binding region with collagen and fibronectin) and a catalytic region composed of the catalytic triad Ser630, Asp708 and His740. DPP4 contains nine potential glycosylation sites for glycosylation modification. Among them, co-translational core N-glycosylation was significantly associated with DPP4 folding and stability, whereas N-terminal sialylation appeared to regulate more pathophysiological processes. Hypersialylated DDP4 is responsible for the development of HIV and rheumatoid arthritis, while undersialylated DPP4 is shown to be linked with lung cancer[1].

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