

## CD26/Dipeptidyl Peptidase 4 Protein, Mouse (HEK293, Fc)

<b>Cat. No.:</b>	HY-P75429
<b>Synonyms:</b>	Dipeptidyl peptidase 4; ADABP; ADCP-2; DPP IV; TP103; CD26; DPP4
<b>Species:</b>	Mouse
<b>Source:</b>	HEK293
<b>Accession:</b>	P28843 (S29-H760)
<b>Gene ID:</b>	13482
<b>Molecular Weight:</b>	Approximately 122.5 kDa

### PROPERTIES

#### AA Sequence

SKDEAAADSR	RTYSLADY LK	STFRVKSYSL	WWVSDFEYLY
KQENNILLLN	AEHGNSSIFL	ENSTFESFGY	HSVSPDRLFV
LLEYNYVKQW	RHSYTASYNI	YDVNKRQLIT	E EKIPNNTQW
ITWSP EGHKL	AYVWKNDIYV	KVEPHLPSHR	ITSTGEENV I
YNGITDWVYE	EEVFGAYSAL	WWSPNNTFLA	YAQFNDTGVP
LIEYSFY SDE	SLQYPKTVWI	PYPKAGAVNP	TVKFFIVNID
SLSSSSSAAP	IQIPAPASVA	RGDHYLCDVV	WATEERISLQ
WLRRIQNY SV	MAICDYDKIN	LTWNC PSEQQ	HVEMSTTGWV
GRFRPAEPHF	TS DGSSFYKI	ISDKDGYKHI	CHFPKDKKDC
TFITKGAW EV	ISIEAL TSDY	LYYISNQYKE	MPGGRNLYKI
QLTDHTNVKC	LSCDLNPERC	QYYAVSFSKE	AKYYQLGCWG
PGLPLYTLHR	STDHKE LRVL	EDNSALDRML	QDVQMPSKKL
DFIVLNETRF	WYQMILPPHF	DKSKKYPLLL	DVYAGPCSQK
ADASFRLNWA	TYLASTENI I	VASF DGRGSG	YQGDKIMHAI
NRRLG TLEVE	DQIEAARQFV	KMGFVDSKRV	AIWGWSYGGY
VTSMVLGSGS	GVFKCGIAVA	PVSRWEYYDS	VYTERYMGLP
IPEDNLDHYR	NSTVMSRAEH	FKQVEYLLIH	GTADDNVH FQ
QSAQISKALV	DAGVDFQAMW	YTDEDHG IAS	STAHQHIYSH
MSHF LQQCFS	LH		

#### Biological Activity

Measured by its ability to cleave the fluorogenic peptide substrate, Gly-Pro-7-amido-4-methylcoumarin (GP-AMC). Read at excitation and emission wavelengths of 380 nm and 460 nm. The specific activity is 1362.0674 pmol/min/μg, as measured under the described conditions.

#### Appearance

Lyophilized powder.

#### Formulation

Lyophilized from a 0.2 μm filtered solution of 20 mM PB, 150 mM NaCl, pH 7.4.

#### Endotoxin Level

<1 EU/μg, determined by LAL method.

#### Reconstitution

It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH<sub>2</sub>O. For long term storage it is

	recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
<b>Storage &amp; Stability</b>	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.
<b>Shipping</b>	Room temperature in continental US; may vary elsewhere.

## DESCRIPTION

### Background

The CD26/Dipeptidyl Peptidase 4 protein serves as a cell surface glycoprotein receptor crucial for the costimulatory signal essential in T-cell receptor (TCR)-mediated T-cell activation. Functioning as a positive regulator of T-cell coactivation, CD26 binds to ADA, CAV1, IGF2R, and PTPRC. Its interactions with CAV1 and CARD11 induce T-cell proliferation and NF-kappa-B activation in a T-cell receptor/CD3-dependent manner. Additionally, CD26's association with ADA regulates lymphocyte-epithelial cell adhesion, while its partnership with FAP contributes to pericellular proteolysis of the extracellular matrix (ECM), facilitating the migration and invasion of endothelial cells into the ECM. CD26 may also play a role in promoting lymphatic endothelial cell adhesion, migration, and tube formation. When overexpressed, CD26 enhances cell proliferation, a process inhibited by GPC3. Beyond its coactivation role, CD26 functions as a serine exopeptidase with dipeptidyl peptidase activity, regulating various physiological processes by cleaving peptides in the circulation, including chemokines, mitogenic growth factors, neuropeptides, and peptide hormones, specifically targeting peptides with unsubstituted N-termini when the penultimate residue is proline.

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

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