

## Product datasheet

# Recombinant human CD26 protein ab155641

[2 Images](#)

### Description

<b>Product name</b>	Recombinant human CD26 protein
<b>Biological activity</b>	Measured by its ability to cleave the fluorogenic peptide substrate, Gly-Pro-7-amido-4-methylcoumarin (GPAMC). The specific activity is >3000 pmol/min/μg.
<b>Purity</b>	> 95 % SDS-PAGE.
<b>Endotoxin level</b>	< 1.000 Eu/μg
<b>Expression system</b>	HEK 293 cells
<b>Accession</b>	<a href="#">P27487</a>
<b>Protein length</b>	Protein fragment
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human
<b>Sequence</b>	<p>NKGTDDATADSRKTYTLTDYLKNTYRLKLYSLRWISDH  EYLYKQENNILV FNAEYGNSSV  FLENSTFDEFGHSINDYSISPDGQFILLEYNVVKQWRH  SYTASYDIYDLNKRQLITEERI  PNNTQVWTWSPVGHKLAYVWNNDIYV  KIEPNLPSYRITWTGKEDIYNGITDWWYEEEVF  SAYSALWWSPNGTF  LAYAQFNDTEVPLIEYSFYSDSLQYPKTVRVPYPKAG  AVNPTVKF FV  VNTDSLSSVTNATSIQITAPASMLIGDHLYCDVTWATQE  RISLQWLRRIQ NYSVMDIC  DYDESSGRWNCLVARQHIEMSTTGWVGRFRPSEPHF  TLDG NSFYKIISNEEGYRHICYFQ  IDKKDCTFITKGTWEVIGIEALTSYLY  YISNEYKGMPPGRNLYKIQLSDYTKVTCLSCE  LNPERCQYYSVSFSKE  AKYYQLRCSGPGPLPLYTLHSSVNDKGLRVLEDNSALD  KMLQNVQ MPSK  KLDIFILNETKFWYQMILPPHFDKSKKYPLLLDVYAGPC  SQKADTVFRLN WATYLA  STENIVASFDRGSGYQGDKIMHAINRRLGTFEVEDQI  EAA RQFSKMGFVDNKRIAWG</p>

WSYGGYVTSMLVLSGSGVFKCGIAPVSR  
WEYDSVYTERYMGLPTPEDNLDHYRNSTV  
MSRAENFKQVEYLLIHGT  
ADDNVHFQSSAQISKALVDVGVDFQAMWYDDEDHGI  
ASSTAH QHIYTH MSHFIKQCFSLP

<b>Predicted molecular weight</b>	85 kDa including tags
<b>Amino acids</b>	29 to 766
<b>Tags</b>	His tag C-Terminus

## Specifications

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Our [Abpromise guarantee](#) covers the use of **ab155641** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	Functional Studies SDS-PAGE
<b>Form</b>	Lyophilised

## Preparation and Storage

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<b>Stability and Storage</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.  pH: 7.40 Constituents: 95% PBS, 5% Trehalose  This product is an active protein and may elicit a biological response in vivo, handle with caution.
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<b>Reconstitution</b>	It is recommended to reconstitute the lyophilized protein in sterile deionized water to a final concentration of 200 ug/ml. Solubilize for 30 to 60 minutes at room temperature with occasional gentle mixing. Carrier protein (0.1% HSA or BSA) is strongly recommended for further dilution and long term storage.
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## General Info

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<b>Function</b>	Cell surface glycoprotein receptor involved in the costimulatory signal essential for T-cell receptor (TCR)-mediated T-cell activation. Acts as a positive regulator of T-cell coactivation, by binding at least ADA, CAV1, IGF2R, and PTPRC. Its binding to CAV1 and CARD11 induces T-cell proliferation and NF-kappa-B activation in a T-cell receptor/CD3-dependent manner. Its interaction with ADA also regulates lymphocyte-epithelial cell adhesion. In association with FAP is involved in the pericellular proteolysis of the extracellular matrix (ECM), the migration and invasion of endothelial cells into the ECM. May be involved in the promotion of lymphatic endothelial cells adhesion, migration and tube formation. When overexpressed, enhanced cell proliferation, a process inhibited by GPC3. Acts also as a serine exopeptidase with a dipeptidyl peptidase activity that regulates various physiological processes by cleaving peptides in the circulation, including many chemokines, mitogenic growth factors, neuropeptides and peptide hormones. Removes N-terminal dipeptides sequentially from polypeptides having unsubstituted N-termini provided that the penultimate residue is proline.
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<b>Tissue specificity</b>	Expressed specifically in lymphatic vessels but not in blood vessels in the skin, small intestine, esophagus, ovary, breast and prostate glands. Not detected in lymphatic vessels in the lung,
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kidney, uterus, liver and stomach (at protein level). Expressed in the poorly differentiated crypt cells of the small intestine as well as in the mature villous cells. Expressed at very low levels in the colon.

### Sequence similarities

Belongs to the peptidase S9B family, DPPIV subfamily.

### Domain

The extracellular cysteine-rich region is necessary for association with collagen, dimer formation and optimal dipeptidyl peptidase activity.

### Post-translational modifications

The soluble form (Dipeptidyl peptidase 4 soluble form also named SDPP) derives from the membrane form (Dipeptidyl peptidase 4 membrane form also named MDPP) by proteolytic processing.

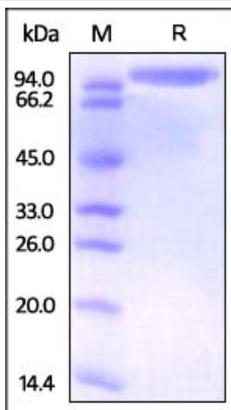
N- and O-Glycosylated.

Phosphorylated. Mannose 6-phosphate residues in the carbohydrate moiety are necessary for interaction with IGF2R in activated T-cells. Mannose 6-phosphorylation is induced during T-cell activation.

### Cellular localization

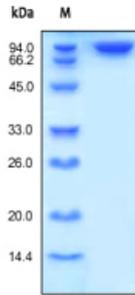
Cell membrane. Apical cell membrane. Cell projection > invadopodium membrane. Cell projection > lamellipodium membrane. Cell junction. Membrane raft. Translocated to the apical membrane through the concerted action of N- and O-Glycans and its association with lipid microdomains containing cholesterol and sphingolipids. Redistributed to membrane rafts in T-cell in a interleukin-12-dependent activation. Its interaction with CAV1 is necessary for its translocation to membrane rafts. Colocalized with PTPRC in membrane rafts. Colocalized with FAP in invadopodia and lamellipodia of migratory activated endothelial cells in collagenous matrix. Colocalized with FAP on endothelial cells of capillary-like microvessels but not large vessels within invasive breast ductal carcinoma. Colocalized with ADA at the cell junction in lymphocyte-epithelial cell adhesion. Colocalized with IGF2R in internalized cytoplasmic vesicles adjacent to the cell surface and Secreted. Detected in the serum and the seminal fluid.

## Images



Human DPPIV (His Tag) on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

SDS-PAGE - Recombinant human CD26 protein  
(ab155641)



SDS-PAGE - Recombinant human CD26 protein  
(ab155641)

SDS PAGE of reduced ab155641 stained overnight with Coomassie Blue. Protein migrates as 95 kDa in reduced SDS-PAGE resulting from glycosylation.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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