Anti-DPP4 / CD26 Antibody [JM11-42] - BSA and Azide free

HA750396

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB
Molecular Wt:	Predicted band size: 88 kDa
Clone number:	JM11-42

Description: Dipeptidyl peptidase-4 (DPP4 or DPPIV), also known as adenosine deaminase complexing protein 2 or CD26 (cluster of differentiation 26) is a protein that, in humans, is encoded by the DPP4 gene. DPP4 is related to FAP, DPP8, and DPP9. The enzyme was discovered in 1966 by Hopsu-Havu and Glenner, and as a result of various studies on chemism, was called dipeptidyl peptidase IV [DP IV]. The protein encoded by the DPP4 gene is an enzyme expressed on the surface of most cell types and is associated with immune regulation, signal transduction, and apoptosis. It is a type II transmembrane glycoprotein, but a soluble form, which lacks the intracellular and transmembrane part, is present in blood plasma and various body fluids. DPP-4 is a serine exopeptidase that cleaves X-proline or X-alanine dipeptides from the N-terminus of polypeptides. Peptide bonds involving the cyclic amino acid proline cannot be cleaved by the majority of proteases and an N-terminal X-proline "shields" various biopeptides.[7] Extracellular proline-specific proteases therefore play an important role in the regulation of these biopeptides. DPP-4 is known to cleave a broad range of substrates including growth factors, chemokines, neuropeptides, and vasoactive peptides. The cleaved substrates lose their biological activity in the majority of cases, but in the case of the chemokine RANTES and neuropeptide Y, DPP-4 mediated cleavage leads to a shift in the receptor subtype binding.

Immunogen:	Synthetic peptide within Human CD26 aa 701-747 / 766 (Extracellular).
Positive control:	LoVo cell lysate, Caco-2 cell lysate, mouse thymus tissue lysate, rat thymus tissue lysate, mouse liver tissue lysate, rat liver tissue lysate, human liver tissue, rat epididymis tissue.
Subcellular location:	Secreted, Cell membrane, Apical cell membrane, invadopodium membrane, lamellipodium membrane, Cell junction, Membrane raft.
Database links:	SwissProt: P27487 Human | P28843 Mouse | P14740 Rat
Recommended Dilutions:	
WB	1:2,000-1:5,000
Storage Buffer:	1*PBS (pH7.4).
Storage Instruction:	Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.
Purity:	Protein A affinity purified.

Images

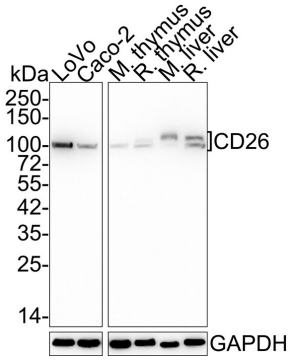

Fig1: Western blot analysis of DPP4 / CD26 on different lysates with Rabbit anti-DPP4 / CD26 antibody (HA750396) at 1/5,000 dilution.

Lane 1: LoVo cell lysate
Lane 2: Caco-2 cell lysate
Lane 3: Mouse thymus tissue lysate
Lane 4: Rat thymus tissue lysate
Lane 5: Mouse liver tissue lysate
Lane 6: Rat liver tissue lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 88 kDa
Observed band size: 100/110 kDa

Exposure time: 1 minute 21 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA750396) at 1/5,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

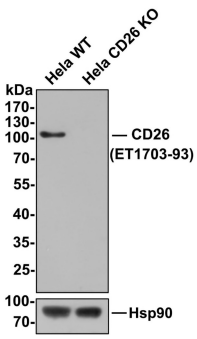

Fig2: All lanes: Western blot analysis of CD26 with anti-CD26 antibody (HA750396) at 1:500 dilution.
Lane 1: Wild-type Hela whole cell lysate (10 µg).
Lane 2: CD26 knockout Hela whole cell lysate (10 µg).

ET1703-93 was shown to specifically react with CD26 in wild-type Hela cells. NO band was observed when CD26 knockout sample was tested. Wild-type and CD26 knockout samples were subjected to SDS-PAGE. Proteins were transferred to a PVDF membrane and blocked with 5% NFDM in TBST for 1 hour at room temperature. The primary antibody (ET1703-93, 1:500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG-HRP Secondary Antibody (HA1001) at 1:300,000 dilution was used for 1 hour at room temperature.