abcam

Product datasheet

Anti-DPP4 antibody [EPR18215] ab187048

יולצעבע RabMAb

★★★★★ 2 Abreviews 7 References 画像数6

製品の概要

製品名 Anti-DPP4 antibody [EPR18215]

製品の詳細 Rabbit monoclonal [EPR18215] to DPP4

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P, IHC-Fr

種交差性 交差種: Mouse, Rat

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: Rat lung, thymus, liver and kidney tissue lysate; mouse lung and thymus tissue lysate. IHC-P:

Mouse liver tissue; rat liver tissue. IHC-Fr: Mouse liver tissue; rat liver tissue.

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

バッファー pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS

精製度 Protein A purified

ポリモノ モノクローナル クローン名 EPR18215

ΙgG アイソタイプ

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab187048の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		1/1000. Detects a band of approximately 110 kDa (predicted molecular weight: 88 kDa).
IHC-P	**** <u>(2)</u>	1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IHC-Fr		1/200 - 1/1000. Rat: use at 1/200Mouse: use at 1/1000

ターゲット情報

機能

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.

組織特異性

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, 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.

配列類似性

Belongs to the peptidase S9B family. DPPIV subfamily.

ドメイン

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

翻訳後修飾

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.

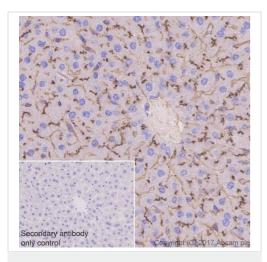
Phosphorylated. Mannose 6-phosphate residues in the carbohydrate moiety are necessary for interaction with IGF2R in activated T-cells. Mannose 6-phosphorylation is induced during T-cell activation.

細胞内局在

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.

画像



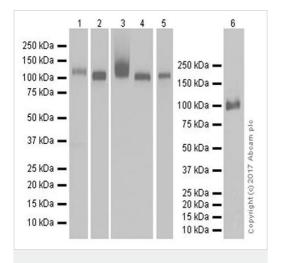
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-DPP4 antibody
[EPR18215] (ab187048)

Immunohistochemical analysis of paraffin-embedded mouse liver tissue labeling CD26 with ab187048 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Membranous staining on bile canaliculi of mouse liver is observed (PMID: 23361237). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0).



Western blot - Anti-DPP4 antibody [EPR18215] (ab187048)

All lanes : Anti-DPP4 antibody [EPR18215] (ab187048) at 1/1000 dilution

Lane 1: Mouse lung lysate

Lane 2: Rat lung lysate

Lane 3: Mouse thymus lysate

Lane 4: Rat thymus lysate

Lane 5: Rat liver lysate

Lane 6: Rat kidney lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit $\lg G \ H\&L \ (HRP) \ (\underline{ab97051})$ at 1/100000 dilution (Goat Anti-Rabbit $\lg G \ H\&L \ (HRP))$

Predicted band size: 88 kDa

Observed band size: 110 kDa

Blocking and dilution buffer: 5% NFDM/TBST

Exposure times.

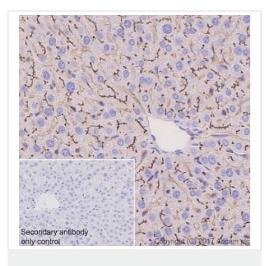
Lanes 1, 3, 4: 30 seconds

Lane 2: 20 seconds

Lane 5: 10 seconds

Lane 6: 15 seconds

The molecular weight observed is consistent with what has been described in the literature (PMID: 25589660).

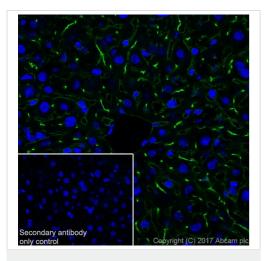


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-DPP4 antibody
[EPR18215] (ab187048)

Immunohistochemical analysis of paraffin-embedded rat liver tissue labeling CD26 with ab187048 at 1/2000 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) Ready to use. Membranous staining on bile canaliculi of rat liver is observed (PMID: 23361237). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0).

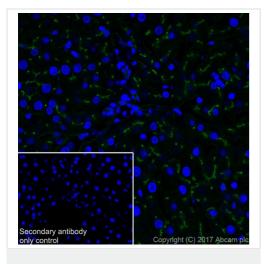


Immunohistochemistry (Frozen sections) - Anti-DPP4 antibody [EPR18215] (ab187048)

Immunohistochemical analysis of 4% PFA-fixed, 0.2 % Triton X-100 permeabilized mouse liver tissue labeling CD26 with ab187048 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) at 1/1000 dilution (green). Strong positive staining on the bile canaliculi and moderate positive staining in sinusoid endothelial cells is observed (PMID: 23361237). The nuclear counter stain is DAPI (blue)

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution.

Antigen retrieval: Heated Tris-EDTA (pH9.0) (ab94681).

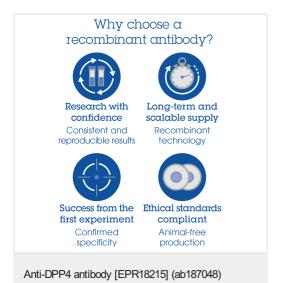


Immunohistochemistry (Frozen sections) - Anti-DPP4 antibody [EPR18215] (ab187048)

Immunohistochemical analysis of 4% PFA-fixed, 0.2 % Triton X-100 permeabilized rat liver tissue labeling CD26 with ab187048 at 1/200 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) at 1/1000 dilution (green). Strong positive staining on the bile canaliculi and moderate positive staining in sinusoid endothelial cells is observed (PMID: 23361237). The nuclear counter stain is DAPI (blue)

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution.

Antigen retrieval: Heated Tris-EDTA (pH9.0) (ab94681).



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