

## Anti-PLXDC2 (4G3) rabbit mAb APC Conjugate #2534

For Research Use Only. Not For Use In Diagnostic Procedures.

### 製品の概要

製品名	Anti-PLXDC2 (4G3) rabbit mAb APC Conjugate (#2534)
フォーマット	APC 標識
種交差性	Human
組成	PBS (pH 7.4), 0.1% BSA, 0.02% NaN <sub>3</sub>
精製方法	Ion exchange chromatography
アプリケーション	Flow cytometry, 1:100-1:1000
免疫原	HEK293 cells expressing human PLXDC2
ポリ/モノ	モノクローナル
クローン名	4G3
アイソタイプ	Rabbit IgG1k
保管条件	4°C
別名称	TEM7R, 1200007L24Rik, 5430431D22Rik
Uniprot ID:	Q6UX71

### ターゲット情報

Plexin domain containing protein 2 (PLXDC2), a cell surface transmembrane protein, is expressed in many tissues including haematopoietic stem cells, neural stem cells, pluripotent stem cells, and tumor cells. PLXDC2 may play an important role in neuronal growth, stem cell development, angiogenesis, and cancer cell growth. Recently PLXDC2 was reported a good cell surface marker as human haematopoietic stem cells <sup>(1)</sup>.

PLXDC2 has been reported as a receptor for pigment epithelium derived factor (PEDF) <sup>(2)</sup> or as an activating ligand for adhesion G-protein coupled receptor D1 (Adgrd1) <sup>(3)</sup>. Also PLXDC2 was thought as a novel interaction partner and an entry receptor for rhesus monkey rhadinovirus (RRV) <sup>(4)</sup>. The gene expression level of PLXDC2 was elevated in the peripheral blood of stroke patients <sup>(5)</sup> or in mouse bone marrow-derived macrophages in response to *Helicobacter pylori* <sup>(6)</sup>. The protease BACE1 ( $\beta$ -Site APP Cleaving Enzyme), a major drug target in Alzheimer's disease, cleaves the amyloid precursor protein (APP) as well as PLXDC2 as one of several other substrates <sup>(7)</sup>.

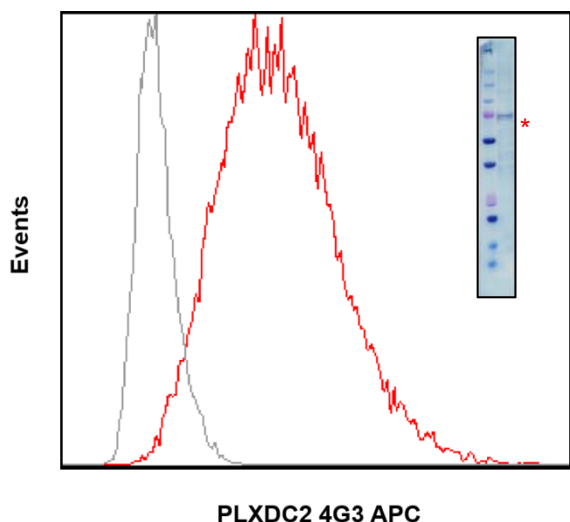
## 参照論文

- (1) Tanaka Y et al 2021 bioRxiv Sep 27: 2021.09.27.461900v1.doi: 10.1101/2021.09.27.461900.
- (2) Cheng G et al. 2014 Elife. 3:e05401
- (3) Bianchi E et al 2021 Nat Commun. 2021 12(1):1251.
- (4) Großkopf AK et al. 2021 PLoS Pathog. 17(3):e1008979
- (5) O'Connell GC et al. 2017 Genom Data. Sep 14:47-52.
- (6) Tubau-Juni N, et al 2020 Sci. Rep. 10(1):11506.
- (7) Dislich B et al. 2015 Cell Proteomics. 10:2550-63

## 本抗体を使用した論文 (論文数 4)

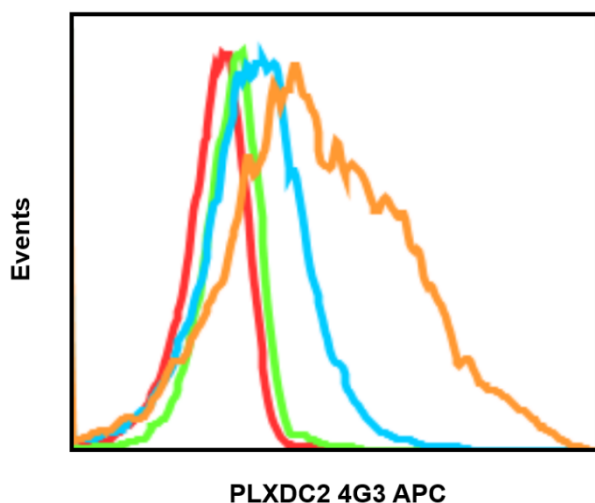
1. Shimizu, H. et al. Improving the quality of a recombinant rabbit monoclonal antibody against PLXDC2 by optimizing transient expression conditions and purification method. Protein Expr. Purif. 146, 27–33 (2018).
2. Yamamoto N. et al. Expression Pattern of Plexin Domain Containing 2 in Human Hepatocellular Carcinoma. Monoclon Antib Immunodiagn Immunother. 39(2):57-60 (2020)
3. Hamada, Y. et al. Plexin domain containing protein 2 is more expressed within the invasive area of human colorectal cancer tissues. Human Cell 34(5) 1580-1583 (2021).
4. Tanaka Y. et al. Prospective isolation of mouse and human hematopoietic stem cells using Plexin domain containing 2. bioRxiv Sep 27: 2021.09.27.461900v1.doi: 10.1101/2021.09.27.461900. (2021)

使用例



Flow cytometry analysis of human monocyte THP-1 cells (gray) pretreated with human FcR-Blocking reagent (Immunostep) using anti-PLXDC2 (4G3) rabbit mAb APC Conjugate at 1 µg/mL Cat. #2534 (red).

The inset shows the expression of PLXDC2 in THP-1 cells detected by western blotting using an anti-PLXDC2-4G3 rabbit antibody Cat. #2531.



Flow cytometry analysis of HEK293 cells transfected with PLXDC2 (orange) or untransfected (blue) using anti-PLXDC2 (4G3) rabbit mAb at 1 µg/mL Cat. #2534 (red).

The red and green lines show unstained HEK293 cells and PLXDC2-transfected HEK293 cells, respectively.