# abcam

## Product datasheet

# Anti-PIP2 antibody [2C11] ab11039

★★★★★ 4 Abreviews 24 References 画像数 5

#### 製品の概要

製品名 Anti-PIP2 antibody [2C11]

製品の詳細 Mouse monoclonal [2C11] to PIP2

由来種 Mouse

アプリケーション 適用あり: IHC-P, ICC/IF, ELISA, Neutralising

種交差性 交差種: Species independent

免疫原 Chemical/ Small Molecule corresponding to PIP2. Liposomes containing synthetic dipalmitoyl

Ptdlns(4,5)P2 or Ptdlns(3,4,5)P3

ポジティブ・コントロール IHC-P: FFPE human kidney normal and FFPE mouse normal brain. ICC/IF: HepG2 cell line,

Neuro2a cell line

特記事項 For testing in lipid dot blot assay, follow the protocol used in Thomas et al. Biochem Soc Trans

27:648-52 (1999) (PMID: 10917659, please see the References tab).

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact orders@abcam.com.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

#### 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 or -

80°C. Avoid freeze / thaw cycle.

**バッファー** pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Some batches contain 6.97% L-Arginine as a stabilizing agent. For lot-specific buffer information,

please contact our Scientific Support team.

精製度 Protein A purified

ポリ/モノ モノクローナル

**クローン名** 2C11

**₹I**□-₹ Sp2/0-Ag14

アイソタイプ IgM

#### アプリケーション

**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ab11039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
IHC-P		Use a concentration of 1 - 5 $\mu$ g/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF	*** <u>*</u> (2)	Use a concentration of 1 - 5 µg/ml. Fixation with 100% MeOH (5 min) or 4% PFA (10 min).
ELISA		Use at an assay dependent concentration.
Neutralising		Use at an assay dependent concentration.

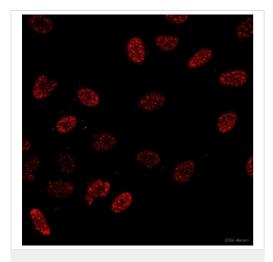
#### ターゲット情報

**関連性** Phosphatidylinositol 4,5-biphosphate (PIP2) is a membrane phospholipid that has been

implicated in a variety of cellular processes, including synaptic vesicle recycling and signal transduction pathways. PLCD4 hydrolyzes PIP2 to generate 2 second messenger molecules

diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3).

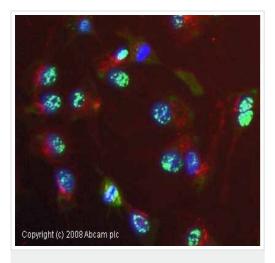
### 画像



Immunocytochemistry - Anti-PIP2 antibody [2C11] (ab11039)

This image is courtesy of an anonymous Abreview

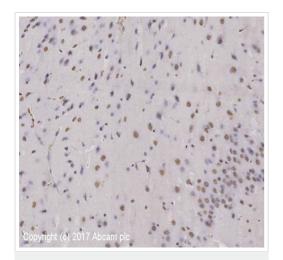
Immunocytochemistry analysis of methanol-fixed 0.3% tritonX-100 permeabilized Bone Osteosarcoma Epithelial Cells staining with ab11039 at 1/200. Secondary antibody was Cy3® anti-mouse at 1/300 dilution. Samples were incubated with the primary antibody for 16 hours at 4°C. Blocking was done using 5% serum for 1 hour at 25°C.



Immunocytochemistry/ Immunofluorescence - Anti-PIP2 antibody [2C11] (ab11039)

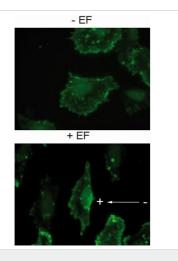
ICC/IF image of ab11039 stained human HepG2 cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab11039, 5  $\mu$ g/ml) overnight at +4°C.

The secondary antibody (green) was Alexa Fluor® 488 goat antimouse IgM (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue). This antibody also gave a positive IF result in HeLa, Hek293 and MCF7 cells.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PIP2 antibody [2C11] (ab11039)

IHC image of PIP2 staining in mouse normal brain formalin fixed paraffin embedded tissue section. The section was pre-treated using pressure cooker heat mediated antigen retrieval with sodium citrate buffer (pH6) for 30mins. The section was incubated with ab11039, 1µg/ml overnight at +4°C. An HRP-conjugated secondary (Ab98679, 1/1000 dilution) was used for 1hr at room temperature. The section was counterstained with haematoxylin and mounted with DPX.

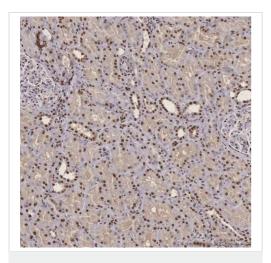


Immunocytochemistry/ Immunofluorescence - Anti-PIP2 antibody [2C11] (ab11039)

Image from Ozkucur N et al., BMC Cell Biol. 2011 Jan 22;12:4. Fig S4.; doi:10.1186/1471-2121-12-4; 22 January, 2011, BMC Cell Biology 2011, 12:4

Immunofluorescence analysis of Human SaOS-2 (Human osteosarcoma) cells, staining PIP2 with ab11039. Cells were either unstimulated (upper panel) or stimulated with direct current (lower panel).

Cells were fixed in formaldehyde, permeabilized and then blocked with 1% BSA for 20 min. Cells were then incubated with a primary antibody (1/200) overnight at 4°C. A FITC-conjugated anti-mouse IgG was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PIP2 antibody [2C11] (ab11039)

IHC image of PIP2 staining in a formalin fixed, paraffin embedded human normal kidney tissue section\*, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab11039, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre

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