# abcam

#### Product datasheet

## Anti-FDPS/FPS antibody [EPR4628] ab109007

Recombinant RabMAb

#### 4 Images

#### Overview

**Product name** Anti-FDPS/FPS antibody [EPR4628]

**Description** Rabbit monoclonal [EPR4628] to FDPS/FPS

**Host species** Rabbit

**Tested applications** Suitable for: WB, IHC-P, Flow Cyt (Intra)

Unsuitable for: ICC/IF or IP

Reacts with: Human Species reactivity

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control THP1, HepG2, and Human fetal liver lysates; Human kidney tissue.

**General notes** 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**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

#### **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer pH: 7.20

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

**Purity** Protein A purified

Clonality Monoclonal

Clone number EPR4628

**Isotype** IgG

#### **Applications**

## The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab109007 in the following tested applications.

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

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Predicted molecular weight: 48 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.  Heat up to 98 degrees C, below boiling, and then let cool for 10-20 min.
Flow Cyt (Intra)		1/1000.  ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

**Application notes** 

Is unsuitable for ICC/IF or IP.

#### **Target**

**Function** Key enzyme in isoprenoid biosynthesis which catalyzes the formation of farnesyl diphosphate

(FPP), a precursor for several classes of essential metabolites including sterols, dolichols, carotenoids, and ubiquinones. FPP also serves as substrate for protein farnesylation and geranylgeranylation. Catalyzes the sequential condensation of isopentenyl pyrophosphate with the

allylic pyrophosphates, dimethylallyl pyrophosphate, and then with the resultant

geranylpyrophosphate to the ultimate product farnesyl pyrophosphate.

Pathway Isoprenoid biosynthesis; farnesyl diphosphate biosynthesis; farnesyl diphosphate from geranyl

diphosphate and isopentenyl diphosphate: step 1/1.

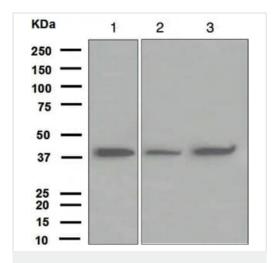
Isoprenoid biosynthesis; geranyl diphosphate biosynthesis; geranyl diphosphate from dimethylallyl

diphosphate and isopentenyl diphosphate: step 1/1.

**Sequence similarities** Belongs to the FPP/GGPP synthase family.

Cellular localization Cytoplasm.

#### **Images**



Western blot - Anti-FDPS/FPS antibody [EPR4628] (ab109007)

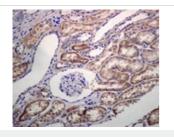
**All lanes :** Anti-FDPS/FPS antibody [EPR4628] (ab109007) at 1/1000 dilution

Lane 1: THP1 cell lysates

Lane 2: HepG2 cell lysates

Lane 3: Human fetal liver lysates

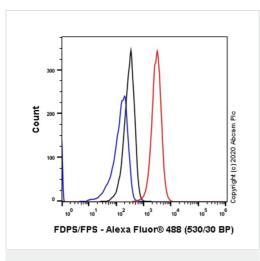
Predicted band size: 48 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-FDPS/FPS antibody
[EPR4628] (ab109007)

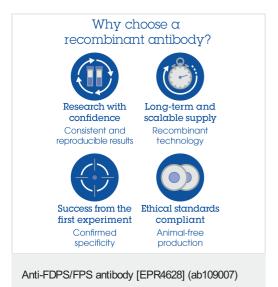
ab109007 at 1/100 dilution staining FDPS/FPS in Human kidney by Immunohistochemistry, Paraffin-embedded tissue.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-FDPS/FPS antibody [EPR4628] (ab109007)

Flow Cytometry analysis of THP-1 (Human monocytic leukemia monocyte) cells labeling FDPS/FPS with purified ab109007 at 1/1000 dilution (1 µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit lgG (Alexa Fluor<sup>®</sup> 488, <u>ab150081</u>) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal lgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



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

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