# abcam

#### Product datasheet

## Anti-Aquaporin 5 antibody [EPR3747] ab92320



★★★★ 7 Abreviews 45 References 3 Images

#### Overview

**Product name** Anti-Aquaporin 5 antibody [EPR3747]

**Description** Rabbit monoclonal [EPR3747] to Aquaporin 5

**Host species** Rabbit

**Tested applications** Suitable for: WB. IHC-P

Unsuitable for: Flow Cyt

Species reactivity Reacts with: Human

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

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

#### **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: 0.01% Sodium azide

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

**Purity** Protein A purified

Clonality Monoclonal Clone number **EPR3747** 

Isotype lgG

**Applications** 

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab92320 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	<b>★</b> ★ ★ ★ ★ (1)	1/1000 - 1/10000. Predicted molecular weight: 28 kDa.
IHC-P	★ ★ ★ ★ ★ (3)	1/1200. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Antigen retrieval is recommended before commencing with IHC staining protocol. The use of an HRP/AP polymerized secondary antibody is recommended as stronger signals have been found using these.  For unpurified use between 1/100 and 1/250

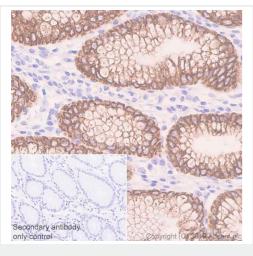
**Application notes** 

Is unsuitable for Flow Cyt.

#### **Target**

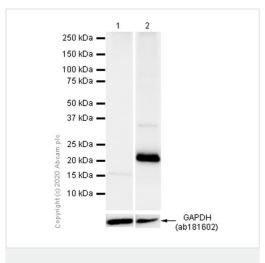
Function	Forms a water-specific channel. Implicated in the generation of saliva, tears, and pulmonary secretions. Required for TRPV4 activation by hypotonicity (PubMed:16571723). Together with	
	TRPV4, controls regulatory volume decrease in salivary epithelial cells (PubMed:16571723).	
Involvement in disease	Keratoderma, palmoplantar, Bothnian type	
Sequence similarities	Belongs to the MIP/aquaporin (TC 1.A.8) family.	
Domain	Aquaporins contain two tandem repeats each containing three membrane-spanning domains and a pore-forming loop with the signature motif Asn-Pro-Ala (NPA).	
Cellular localization	Apical cell membrane.	

#### **Images**



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Aquaporin 5 antibody
[EPR3747] (ab92320)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human stomach tissue sections labelling Aquaporin 5 with purified ab92320 at 1/1200 dilution (0.13 µg/ml). Heat mediated antigen retrieval was performed using Perform heat mediated antigen retrieval using <a href="mailto:ab93684">ab93684</a> (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1/0 dilution. PBS instead of the primary antibody was used as the negative control.



Western blot - Anti-Aquaporin 5 antibody [EPR3747] (ab92320)

**All lanes :** Anti-Aquaporin 5 antibody [EPR3747] (ab92320) at 1/1000 dilution (Purified)

**Lane 1 :** SW480 (Human colorectal adenocarcinoma epithelial cell) prepared in RIPA lysis method whole cell lysate

Lane 2: SW480 (Human colorectal adenocarcinoma epithelial cell) prepared in 1%SDS Hot lysis method whole cell lysate

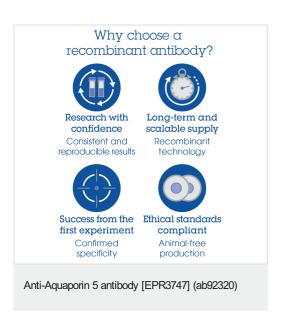
Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 28 kDa Observed band size: 24 kDa

1%SDS Hot lysis method is recommended for this antibody. The molecular weight observed is consistent with what has been described in the literatures (PMID: 32901888, 23313152).



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

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