

## Product datasheet

### Anti-TMPRSS2 antibody [EPR3862] $\alpha$ b109131

KO **VALIDATED** Recombinant RabMAb

★★★★★ [3 Abreviews](#) [30 References](#) [5 Images](#)

#### Overview

Product name	Anti-TMPRSS2 antibody [EPR3862]
Description	Rabbit monoclonal [EPR3862] to TMPRSS2
Host species	Rabbit
Tested applications	<b>Suitable for:</b> WB, IHC-P <b>Unsuitable for:</b> ELISA, Flow Cyt or ICC/IF
Species reactivity	<b>Reacts with:</b> Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Human prostatic adenocarcinoma tissue; WB: Human prostate lysate.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

#### 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: 40% Glycerol, 59% PBS, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR3862
Isotype	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab109131 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 - 1/5000. Detects a band of approximately 54,28 kDa (predicted molecular weight: 54 kDa).
IHC-P	★★★★★ (1)	1/1000 - 1/2000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <b>IHC antigen retrieval protocols</b> . <b>For unpurified use at 1/500 - 1/1000.</b>

### Application notes

Is unsuitable for ELISA, Flow Cyt or ICC/IF.

## Target

### Tissue specificity

Expressed strongly in small intestine. Also expressed in prostate, colon, stomach and salivary gland.

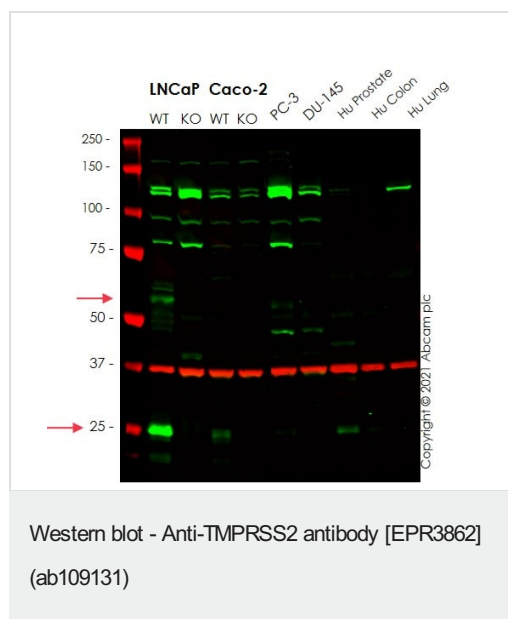
### Sequence similarities

Belongs to the peptidase S1 family.  
Contains 1 LDL-receptor class A domain.  
Contains 1 peptidase S1 domain.  
Contains 1 SRCR domain.

### Cellular localization

Cell membrane and Secreted. Activated by cleavage and secreted.

## Images



**All lanes :** Anti-TMPRSS2 antibody [EPR3862] (ab109131) at 1/2000 dilution

**Lane 1 :** Wild-type LNCaP cell lysate

**Lane 2 :** TMPRSS2 knockout LNCaP cell lysate

**Lane 3 :** Wild-type Caco-2 cell lysate

**Lane 4 :** TMPRSS2 knockout Caco-2 cell lysate

**Lane 5 :** PC-3 cell lysate

**Lane 6 :** DU 145 cell lysate

**Lane 7 :** Human Prostate cell lysate

**Lane 8 :** Human Colon cell lysate

**Lane 9 :** Human Lung cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

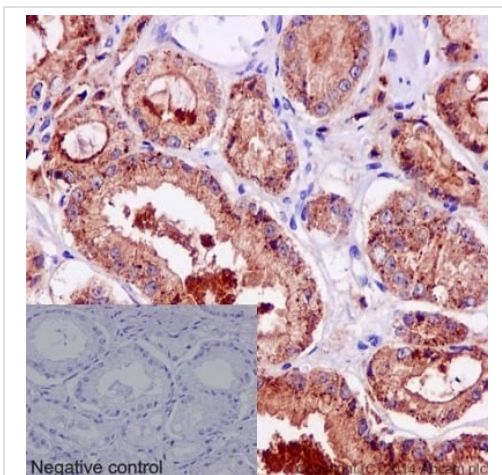
**Predicted band size:** 54 kDa

**Observed band size:** 25,55 kDa

False colour image of Western blot: Anti-TMPRSS2 antibody [EPR3862] staining at 1/2000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] ([ab8245](#)) loading control staining at 1/20000 dilution, shown in red.

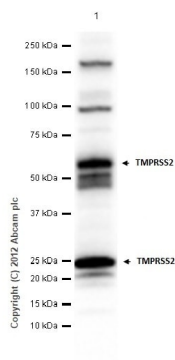
In Western blot, ab109131 was shown to bind specifically to TMPRSS2. A band was observed at 55, 25 kDa in wild-type LNCaP and at 25 kDa in Caco-2 cell lysates with no signal observed at this size in TMPRSS2 knockout LNCaP cell line [ab273745](#) (knockout LNCaP cell lysate [ab275499](#)) and TMPRSS2 knockout Caco-2 cell line [ab273737](#) (knockout Caco-2 cell lysate [ab277340](#)).

To generate this image, wild-type and TMPRSS2 knockout cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 5 % milk in TBS-0.1 % Tween<sup>®</sup> 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye<sup>®</sup> 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.



ab109131 staining TMPRSS2 in Human prostate adenocarcinoma tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed and paraffin-embedded, antigen retrieval was by heat mediation in Tris/EDTA buffer pH9. Samples were incubated with primary antibody (1/1000). An undiluted HRP-conjugated mouse anti-rabbit IgG was used as the secondary antibody. Tissue counterstained with Hematoxylin. PBS was used in the negative control rather than the Primary antibody.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TMPRSS2 antibody [EPR3862] (ab109131)



Western blot - Anti-TMPRSS2 antibody [EPR3862]  
(ab109131)

Anti-TMPRSS2 antibody [EPR3862] (ab109131) at 1/1000 dilution  
+ LNCaP (Human prostate carcinoma epithelial cell) whole cell  
lysate at 20 µg

### Secondary

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 54 kDa

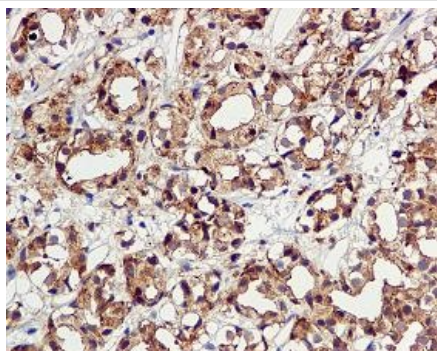
**Observed band size:** 25,54 kDa

**Exposure time:** 7 seconds

Blocking buffer and concentration: 5% NFDM/TBST

Diluting buffer and concentration: 5% NFDM /TBST

54kDa represents full-length TMPRSS2 and 25kDa is the cleaved form. The molecular weights observed are consistent with what have been described in the literature (PMID: 11245484).



Immunohistochemistry (Formalin/PFA-fixed paraffin-  
embedded sections) - Anti-TMPRSS2 antibody  
[EPR3862] (ab109131)

Immunohistochemical analysis of paraffin-embedded Human  
prostatic adenocarcinoma using ab109131, unpurified, at a dilution  
of 1/500.

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

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-TMPRSS2 antibody [EPR3862] (ab109131)

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

### Our Abpromise to you: Quality guaranteed and expert technical support

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors