


## Product datasheet

### Anti-Plectin antibody [E398P] ab32528

**KO VALIDATED** Recombinant RabMAB

★★★★★ [5 Abreviews](#) [33 References](#) [4 Images](#)

#### Overview

|                            |   |
|----------------------------|---|
| <b>Product name</b>        | Anti-Plectin antibody [E398P]   |
| <b>Description</b>         | Rabbit monoclonal [E398P] to Plectin  |
| <b>Host species</b>        | Rabbit  |
| <b>Specificity</b>         | This antibody recognises plectin, a 500-kDa intermediate filament binding protein.  |
| <b>Tested applications</b> | <b>Suitable for:</b> IHC-P, WB<br><b>Unsuitable for:</b> Flow Cyt   |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Human<br><b>Predicted to work with:</b> Mouse, Rat   |
| <b>Immunogen</b>           | Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.  |
| <b>Positive control</b>    | Jurkat whole cell lysate ( <a href="#">ab7899</a> ), human skeletal muscle WB: U-2 OS cell lysate.  |
| <b>General notes</b>       | 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> .<br>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

|                             |  |
|-----------------------------|--|
| <b>Form</b>                 | Liquid   |
| <b>Storage instructions</b> | Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.                                |
| <b>Storage buffer</b>       | pH: 7.20<br>Preservative: 0.01% Sodium azide<br>Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA |
| <b>Purity</b>               | Protein A purified   |
| <b>Clonality</b>            | Monoclonal   |
| <b>Clone number</b>         | E398P  |

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab32528 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   |
|-------------|-----------|---|
| IHC-P       | ★★★★★ (1) | 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. |
| WB          | ★★★★☆ (1) | 1/5000. Predicted molecular weight: 532 kDa.  |

### Application notes

Is unsuitable for Flow Cyt.

## Target

### Function

Interlinks intermediate filaments with microtubules and microfilaments and anchors intermediate filaments to desmosomes or hemidesmosomes. Could also bind muscle proteins such as actin to membrane complexes in muscle. May be involved not only in the filaments network, but also in the regulation of their dynamics. Structural component of muscle. Isoform 9 plays a major role in the maintenance of myofibers integrity.

### Tissue specificity

Widely expressed with highest levels in muscle, heart, placenta and spinal cord.

### Involvement in disease

Epidermolysis bullosa simplex with pyloric atresia  
Epidermolysis bullosa simplex, with muscular dystrophy  
Epidermolysis bullosa simplex, Ogna type  
Limb-girdle muscular dystrophy 2Q

### Sequence similarities

Belongs to the plakin or cytolinker family.  
Contains 1 actin-binding domain.  
Contains 2 CH (calponin-homology) domains.  
Contains 33 plectin repeats.  
Contains 4 spectrin repeats.

### Domain

The N-terminus interacts with actin, the C-terminus with vimentin, desmin, GFAP, cytokeratins, lamin B; whereas both the N-and the C-terminus can bind integrin beta-4.

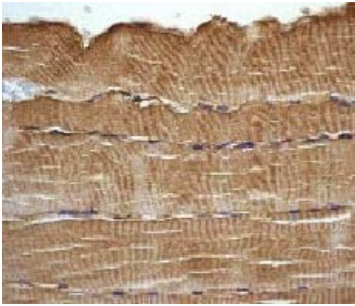
### Post-translational modifications

Phosphorylated by CDK1; regulates dissociation from intermediate filaments during mitosis.

### Cellular localization

Cytoplasm > cytoskeleton. Cell junction > hemidesmosome.

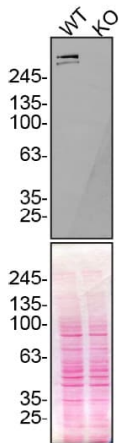
## Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Plectin antibody [E398P] (ab32528)

Immunohistochemical staining of paraffin-embedded human skeletal muscle using ab32528 at a dilution of 1/250

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-Plectin antibody [E398P] (ab32528)

**All lanes** : Anti-Plectin antibody [E398P] (ab32528) at 1/5000 dilution

**Lane 1** : Wild-type U-2 OS cell lysate

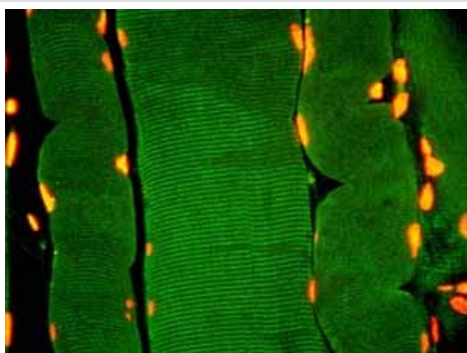
**Lane 2** : PLEC knockout U-2 OS cell lysate

Lysates/proteins at 20  $\mu$ g per lane.

Performed under reducing conditions.

**Predicted band size:** 532 kDa

ab32528 was shown to react with PLEC in wild-type U-2 OS cells in Western blot with loss of signal observed in a PLEC knockout cell line. Wild-type U-2 OS and PLEC knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 5% milk in TBST for 1 hr before incubation with ab32528 overnight at 4 °C at a 1/5000 dilution. Blots were incubated with goat anti-rabbit HRP secondary antibodies at 0.2 $\mu$ g/mL before imaging. These data were provided by YCharOS Inc., an open science company with the mission of characterizing commercially available antibody reagents for all human proteins. Abcam and YCharOS are working together to help address the reproducibility crisis by enabling the life science community to better evaluate commercially available antibodies.



Fluorescent immunohistochemical analysis of paraffin-embedded human skeletal muscle tissue using ab32528. Green-Plectin red-PI

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Plectin antibody [E398P] (ab32528)

### 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-Plectin antibody [E398P] (ab32528)

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

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