# abcam

#### Product datasheet

## Anti-Plexin A4 antibody ab39350

#### 

#### Overview

Product name Anti-Plexin A4 antibody

**Description** Rabbit polyclonal to Plexin A4

Host species Rabbit

Tested applications Suitable for: WB, ICC/IF

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Synthetic peptide corresponding to Mouse Plexin A4 aa 500-600 conjugated to keyhole limpet

haemocyanin.

(Peptide available as ab39349)

General notes

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

#### **Properties**

Form Liquid

Storage instructions 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.

**Storage buffer** pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

Purity Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

1

#### **Applications**

#### The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab39350 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		Use a concentration of 1 µg/ml. Detects a band of approximately 213 kDa (predicted molecular weight: 213 kDa).
ICC/IF	<b>★★★★☆ (1)</b>	Use a concentration of 1 µg/ml.

#### **Target**

Function

Forms a receptor complex with neuropilin-1 and can propagate semaphorin-3A elicited inhibitory

signals into cells and neurons.

Sequence similarities

Belongs to the plexin family.
Contains 4 IPT/TIG domains.

Contains 3 PSI domains.

Contains 1 Sema domain.

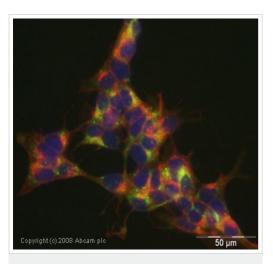
Post-translational

modifications

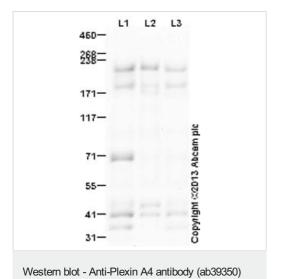
Phosphorylated upon DNA damage, probably by ATM or ATR.

**Cellular localization** Membrane.

### **Images**



Immunocytochemistry/ Immunofluorescence - Anti-Plexin A4 antibody (ab39350) ICC/IF image of ab39350 stained human SH-SY5Y cells. The cells were methanol fixed (5 min), permabilised in TBS-T (20 min) and incubated with the antibody (ab39350, 1µg/ml) for 1h at room temperature. 1%BSA / 10% normal goat serum / 0.3M glycine was used to quench autofluorescence and block non-specific protein-protein interactions. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red). DAPI was used to stain the cell nuclei (blue).



All lanes: Anti-Plexin A4 antibody (ab39350) at 1 µg/ml

Lane 1: Brain (Mouse) Tissue Lysate

Lane 2: Mouse brain tissue lysate - total protein (0 days) (ab7188)

Lane 3: Brain (Rat) Tissue Lysate

Lysates/proteins at 20 µg per lane.

#### **Secondary**

All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/35000

dilution

Developed using the ECL technique.

Performed under reducing conditions.

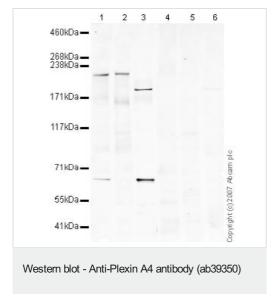
Predicted band size: 213 kDa Observed band size: 213 kDa

Additional bands at: 190 kDa, 41 kDa, 70 kDa. We are unsure as

to the identity of these extra bands.

Exposure time: 8 minutes

This blot was produced using a 3-8% Tris Acetate gel under the TA buffer system. The gel was run at 150V for 60 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% Milk before being incubated with ab39350 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution **ab133406**.



All lanes: Anti-Plexin A4 antibody (ab39350) at 1/250 dilution

Lane 1: Brain (Mouse) Tissue Lysate

Lane 2: Mouse brain tissue lysate - total protein (0 days) (ab7188)

Lane 3: Dorsal Root Ganglia (Mouse) Tissue Lysate

Lane 4: Brain (Mouse) Tissue Lysate with Mouse Plexin A4

peptide (ab39349) at 1 μg/ml

Lane 5: Mouse brain tissue lysate - total protein (0 days) (ab7188)

with Mouse Plexin A4 peptide (ab39349) at 1 µg/ml

Lane 6: Dorsal Root Ganglia (Mouse) Tissue Lysate with Mouse

Plexin A4 peptide (ab39349) at 1 µg/ml

Lysates/proteins at 10 µg per lane.

#### Secondary

**Lanes 1-2:** IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

**Lanes 3-6:** IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 213 kDa

We are unsure as to the biological basis of the band at 190 kDa. However, it is successfully blocked by peptide (<u>ab39349</u>) suggesting this may be a possible isoform of Plexin A4.

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 <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

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