


Product datasheet

Anti-Ephexin-1 (phospho Y87) antibody ab157594

★ ★ ★ ★ ★ [1 Abreviews](#) [1 References](#) [2 Images](#)

Overview

Product name	Anti-Ephexin-1 (phospho Y87) antibody
Description	Rabbit polyclonal to Ephexin-1 (phospho Y87)
Host species	Rabbit
Specificity	The specific band detected in WB is removed by alkaline phosphatase treatment.
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat, Chicken 
Immunogen	Synthetic peptide corresponding to Mouse Ephexin-1 (phospho Y87). Database link: Q8CHT1
Positive control	A431 cell lysate; Mouse C2C12 cells.
General notes	<p>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.</p> <p>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</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	Preservative: 0.05% Sodium azide Constituents: 50% Glycerol, 49% PBS, 0.1% BSA
Purity	Protein A purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab157594 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)	1/1000. Predicted molecular weight: 82 kDa.
ICC/IF		1/200.

Target

Function

Acts as a guanine nucleotide exchange factor (GEF) which differentially activates the GTPases RHOA, RAC1 and CDC42. Plays a role in axon guidance regulating ephrin-induced growth cone collapse. Upon activation by ephrin through EPHA4, the GEF activity switches toward RHOA resulting in its activation. Activated RHOA promotes cone retraction at the expense of RAC1-and CDC42-stimulated growth cone extension.

Tissue specificity

Highly expressed in brain specifically in caudate nucleus and to a lower extent in amygdala and hippocampus. Also detected in lung.

Sequence similarities

Contains 1 DH (DBL-homology) domain.
Contains 1 PH domain.
Contains 1 SH3 domain.

Domain

The DH domain and the PH domain are both required to mediate interaction with EPHA4.

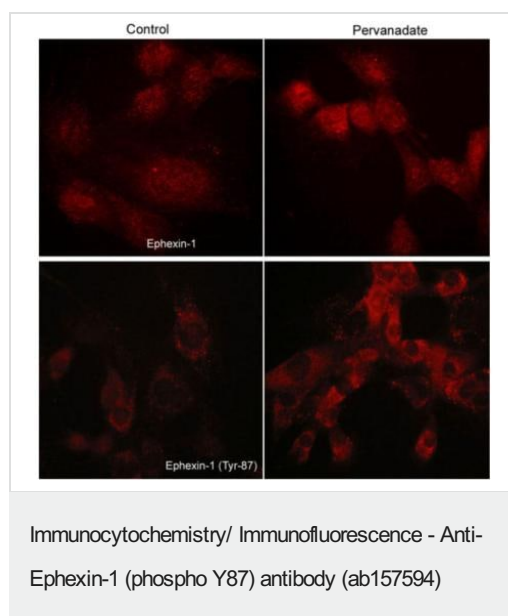
Post-translational modifications

Src-dependent phosphorylation at Tyr-179 upon EPHA4 activation increases the guanine exchange factor activity toward RHOA.

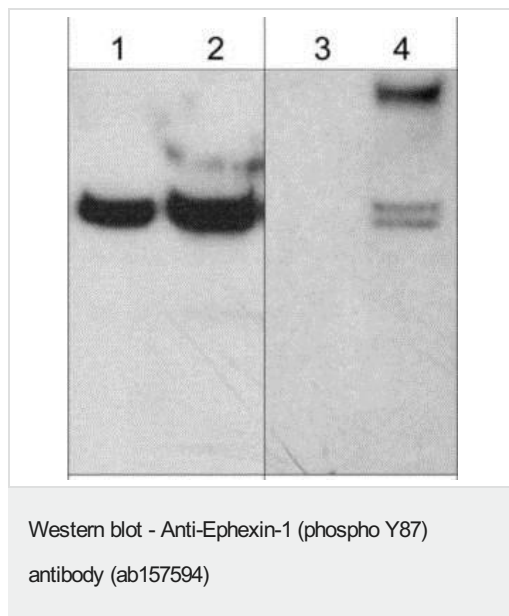
Cellular localization

Cytoplasm. Membrane. Cell projection > growth cone. Associated with membranes. Localizes to axonal growth cones.

Images



Immunofluorescent analysis of mouse C2C12 cells labeling Ephexin-1 with **ab157593** (C-terminal region) (upper images) or ab157594 (Tyr-87) (lower images) at 1/50 dilution, detected using appropriate secondary antibodies conjugated to Cy3. Cells in the right images were treated with pervanadate.



Lanes 1-2 : Anti-Ephexin-1 antibody - C-terminal (**ab157593**) at 1/1000 dilution

Lanes 3-4 : Anti-Ephexin-1 (phospho Y87) antibody (ab157594) at 1/1000 dilution

Lanes 1 & 3 : Lysate from A431 cells

Lanes 2 & 4 : Lysate from A431 cells treated with pervanadate (1 mM) for 30 min.

Predicted band size: 82 kDa

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

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