



Datasheet for ABIN2787993  
**anti-ARHGEF4 antibody (N-Term)**



[Go to Product page](#)

1 Validation

1 Image

### Overview

Quantity:	100 µL
Target:	ARHGEF4
Binding Specificity:	N-Term
Reactivity:	Human, Mouse, Rat, Horse, Rabbit, Cow, Dog, Guinea Pig
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ARHGEF4 antibody is un-conjugated
Application:	Western Blotting (WB)

### Product Details

Immunogen:	The immunogen is a synthetic peptide directed towards the N-terminal region of Mouse Arhgef4
Sequence:	ADDYEAPRAG AREADDSGPE AQCKDQMRT NVINEILSTE RDYIKHLRDI
Predicted Reactivity:	Cow: 79%, Dog: 93%, Guinea Pig: 92%, Horse: 86%, Human: 100%, Mouse: 86%, Rabbit: 100%, Rat: 100%
Characteristics:	This is a rabbit polyclonal antibody against Arhgef4. It was validated on Western Blot.
Purification:	Affinity Purified

### Target Details

Target:	ARHGEF4
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## Target Details

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Alternative Name:	Arhgef4 ( <a href="#">ARHGEF4 Products</a> )
Background:	<p>Arhgef4 acts as guanine nucleotide exchange factor (GEF) for RHOA, RAC1 and CDC42 GTPases. Binding of APC may activate RAC1 GEF activity. The APC-ARHGEF4 complex seems to be involved in cell migration as well as in E-cadherin-mediated cell-cell adhesion. By similarity, it is required for MMP9 up-regulation via the JNK signaling pathway in colorectal tumor cells. Arhgef4 is involved in tumor angiogenesis and may play a role in intestinal adenoma formation and tumor progression.</p> <p>Alias Symbols: 9330140K16Rik, Asef, ENSMUSG00000070955</p> <p>Protein Size: 484</p>
Molecular Weight:	57 kDa
Gene ID:	226970
NCBI Accession:	<a href="#">NM_183019</a> , <a href="#">NP_898840</a>
UniProt:	<a href="#">Q7TNR9</a>
Pathways:	<a href="#">Neurotrophin Signaling Pathway</a>

## Application Details

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Application Notes:	Optimal working dilutions should be determined experimentally by the investigator.
Comment:	Antigen size: 484 AA
Restrictions:	For Research Use only

## Handling

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Format:	Liquid
Concentration:	Lot specific
Buffer:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09 % (w/v) sodium azide and 2 % sucrose.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-20 °C

## Handling

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Storage Comment: For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

## Images

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### Western Blotting

**Image 1.** Host: Rabbit

Target Name: Arhgef4

Sample Tissue: Mouse Testis lysates

Antibody Dilution: 1.0 µg/mL



### Successfully validated (Western Blotting (WB))

by [Instituto de Parasitología y Biomedicina López-Neyra](#)

Report Number: 100106

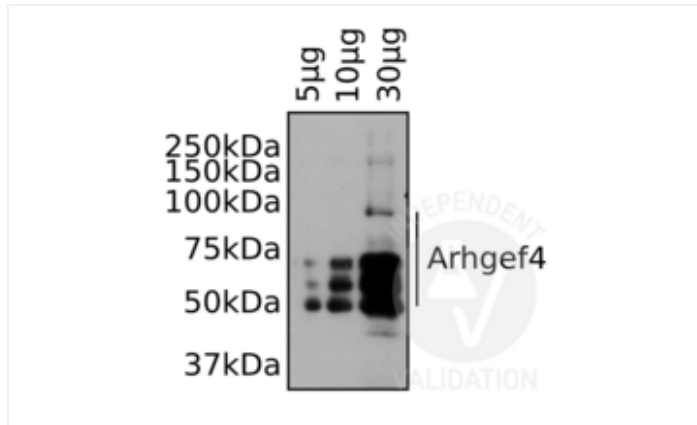
Date: Dec 23 2016

Target:	ARHGEF4
Lot Number:	QC30159-41213
Method validated:	Western Blotting (WB)
Positive Control:	primary mouse microglia
Notes:	Passed. ABIN2787993 specifically recognizes Arhgef4 in primary mouse microglia lysates.
Primary Antibody:	ABIN2787993
Secondary Antibody:	anti-rabbit HRP-conjugated antibodies (DakoCytomation, P0448, lot 00055814)
Protocol:	<ul style="list-style-type: none"><li>• Primary mouse microglia are grown in DMEM (Invitrogen), supplemented with 10% foetal bovine serum (Gibco), 10% horse serum and penicillin and streptomycin (Gibco), at 37°C and 5% CO<sub>2</sub> in a 12-well dish.</li><li>• Lyse cells in 25µl per well cold lysis buffer (10mM Tris-HCl pH 8.0, 150mM NaCl, 1% Nonidet-P40, 1mM EDTA, 10mM NaF, 1mM Na<sub>3</sub>VO<sub>4</sub>, protease inhibitors (Sigma)).</li><li>• Determine total protein content of the lysates using Bradford assay (Bio-Rad, 500-0006, lot 111832).</li><li>• Denature 5µg, 10µg and 30µg total protein for 5min at 95°C in 5µl, 10µl and 20µl Laemmli SDS sample buffer and subsequently separate them on a denaturing self-made 10% SDS-PAGE for 1h at 140V.</li><li>• Transfer proteins onto PVDF membrane (Pall Life Sciences, 75696G, lot T03225) with a semi-dry Western blotting system for 50min at 60mA.</li><li>• Block the membrane with TBST (TBS, 0.1% Tween) containing 5% milk for 1h at RT.</li><li>• Wash membrane 3x 5min with TBST.</li><li>• Incubation with primary rabbit anti-ARHGEF4 antibody (antibodies-online, ABIN2787993, lot QC30159-41213) diluted 1:500 in TBST containing 2% BSA ON at 4°C.</li><li>• Wash membrane 5x 5min with TBST.</li><li>• Incubation with anti-rabbit horseradish peroxidase-conjugated secondary antibodies (DakoCytomation, P0448, lot 00055814) diluted 1:2000 in TBST containing 5% milk for 1h at RT.</li><li>• Wash membrane 5x 5min with TBST and 3x 5min with TBS.</li><li>• Reveal protein bands using ECL Plus Western Blotting Detection Reagent (GE Healthcare, RPN2132, lot 4645641) with Curix RP2 Plus medical X-ray films (AGFA Health Care, ENKMW, lot 79040074) on an AGFA Health Care Curix60-developer.</li></ul>

## Validation report #100106 for Western Blotting (WB)

Experimental Notes: The ARHGEF4 antibody ABIN2787993 reveals multiple bands as is expected for murine Arhgef4.

Image for Validation report #100106



### Validation image no. 1 for anti-rho Guanine Nucleotide Exchange Factor (GEF) 4 (ARHGEF4) (N-Term) antibody (ABIN2787993)

Indicated amounts of total protein from primary mouse microglia cell lysate were separated on a denaturing SDS-PAGE gel and incubated with ABIN2787993 as described in the protocol.