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Datasheet for ABIN6260375

## anti-C9ORF72 antibody (Internal Region)

### 2 Images

#### Overview

Quantity:	100 µL
Target:	C9ORF72
Binding Specificity:	Internal Region
Reactivity:	Human, Rat, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This C9ORF72 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

#### Product Details

Immunogen:	A synthesized peptide derived from human C9orf72, corresponding to a region within the internal amino acids.
Isotype:	IgG
Specificity:	C9orf72 Antibody detects endogenous levels of total C9orf72.
Predicted Reactivity:	Pig, Sheep, Rabbit
Purification:	The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).

#### Target Details

Target:	C9ORF72
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## Target Details

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Alternative Name: C9orf72 ([C9ORF72 Products](#))

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**Background:** Description: Component of the C9orf72-SMCR8 complex, a complex that has guanine nucleotide exchange factor (GEF) activity and regulates autophagy (PubMed:27193190, PubMed:27103069, PubMed:27617292, PubMed:28195531). In the complex, C9orf72 and SMCR8 probably constitute the catalytic subunits that promote the exchange of GDP to GTP, converting inactive GDP-bound RAB8A and RAB39B into their active GTP-bound form, thereby promoting autophagosome maturation (PubMed:27103069). The C9orf72-SMCR8 complex also acts as a regulator of autophagy initiation by interacting with the ATG1/ULK1 kinase complex and modulating its protein kinase activity (PubMed:27617292). Positively regulates initiation of autophagy by regulating the RAB1A-dependent trafficking of the ATG1/ULK1 kinase complex to the phagophore which leads to autophagosome formation (PubMed:27334615). Acts as a regulator of mTORC1 signaling by promoting phosphorylation of mTORC1 substrates (PubMed:27559131). Plays a role in endosomal trafficking (PubMed:24549040). May be involved in regulating the maturation of phagosomes to lysosomes (By similarity). Regulates actin dynamics in motor neurons by inhibiting the GTP-binding activity of ARF6, leading to ARF6 inactivation (PubMed:27723745). This reduces the activity of the LIMK1 and LIMK2 kinases which are responsible for phosphorylation and inactivation of cofilin, leading to cofilin activation (PubMed:27723745). Positively regulates axon extension and axon growth cone size in spinal motor neurons (PubMed:27723745). Plays a role within the hematopoietic system in restricting inflammation and the development of autoimmunity (By similarity).

Gene: C9orf72

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Molecular Weight: 50-54 kDa,25-30 kDa

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Gene ID: 203228

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UniProt: [Q96LT7](#)

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## Application Details

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Application Notes: WB 1:500-1:2000, IHC 1:50-1:200

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Restrictions: For Research Use only

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## Handling

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Format: Liquid

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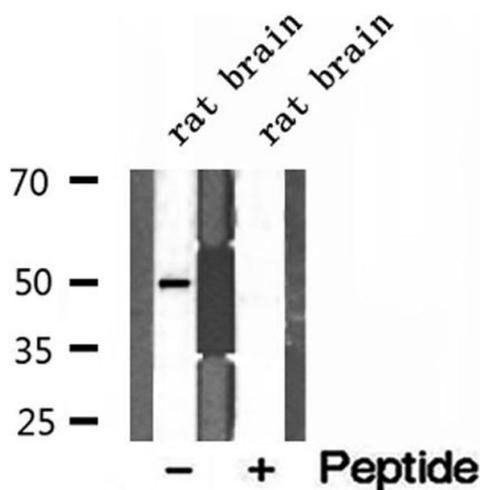
Concentration: 1 mg/mL

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## Handling

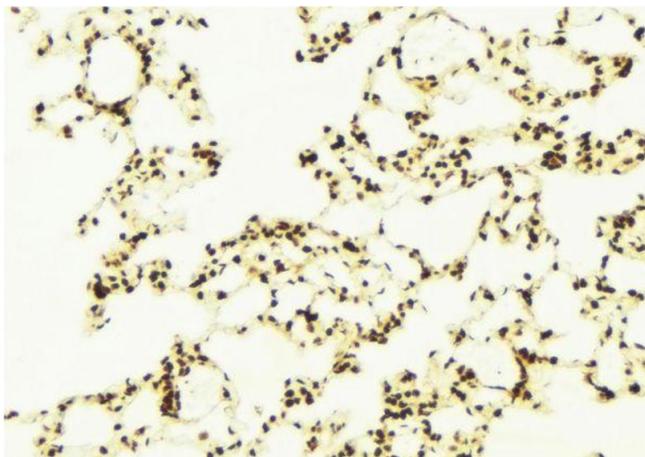
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20 °C. Stable for 12 months from date of receipt.
Expiry Date:	12 months

## Images



### Western Blotting

**Image 1.** Western blot analysis of extracts of rat brain tissue, using C9orf72 antibody.



### Immunohistochemistry

**Image 2.** ABIN6272956 at 1/100 staining Mouse lung tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.