

Rabbit C9orf72 Polyclonal Antibody | anti-C9orf72 antibody

C9orf72 Antibody

CATALOG # AAA322938	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS Immunohistochemistry, Western Blot
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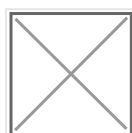
PRODUCT SYNONYMS

C9orf72; Polyclonal Antibody; C9orf72 Antibody; ALSFTD; chromosome 9 open reading frame 72; CI072_HUMAN; FTDALS; MGC23980; Protein C9orf72; RP11-27J8.2; Uncharacterized protein C9orf72; anti-C9orf72 antibody

PRODUCT SPECIFICATIONS

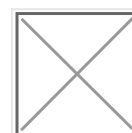
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	C9orf72 antibody detects endogenous levels of C9orf72.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	481
Applicable Applications for anti-C9orf72 antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human C9orf72.
Subcellular Location	Lysosome; Endosome; Nucleus; Extracellular Region or Secreted; Nucleus
Tissue Specificity	Both isoforms are widely expressed, including kidney, lung, liver, heart, testis and several brain regions, such as cerebellum. Also expressed in the frontal cortex and in lymphoblasts (at protein level).
Predicted Cross Reactivity	Pig, Sheep, Rabbit
Similarity	Pig (100%), Sheep (100%), Rabbit (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

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



IHC (Immunohistochemistry)

AAA322938 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 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-C9orf72 antibody	Function: 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). Subunit Structure: Interacts with SMCR8; the interaction is direct (PubMed:27559131, PubMed:27617292). Component of the C9orf72-SMCR8 complex, at least composed of C9orf72, SMCR8 and WDR41 (PubMed:27193190, PubMed:27103069, PubMed:27559131, PubMed:27617292, PubMed:28195531). The C9orf72-SMCR8 complex associates with the ATG1/ULK1 kinase complex (PubMed:27617292, PubMed:28195531). Interacts with ATG1/ULK1 kinase complex members ULK1, ATG13 and RB1CC1 (PubMed:27334615). Interacts with HNRNPA1, HNRNPA2B1 and UBQLN2 (PubMed:24549040). Interacts with small Rab GTPase RAB1A; the interaction mediates recruitment of RAB1A to the ATG1/ULK1 kinase complex (PubMed:27334615). Also interacts with small Rab GTPase RAB7A (By similarity). Interacts with cofilin (PubMed:27723745). Interacts with GTP-binding proteins ARF1 and ARF6 (By similarity).
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NCBI AND UNIPROT INFORMATION

NCBI GI #	365906244
NCBI GeneID	203228
NCBI Accession #	NP_001242983.1
NCBI GenBank Nucleotide #	NM_001256054.2
UniProt Accession #	Q96LT7; Q6NUS9; A8K5W0; D3DRK6; G8I0B6
Molecular Weight	Observed: 50-54 kDa; 25-30 kDa Predicted: 55 kDa
NCBI Official Full Name	guanine nucleotide exchange C9orf72 isoform a
NCBI Official Synonym Full Names	chromosome 9 open reading frame 72
NCBI Official Symbol	C9orf72
NCBI Official Synonym Symbols	ALSFTD; FTDALS; DENNL72; FTDALS1
NCBI Protein Information	guanine nucleotide exchange C9orf72
UniProt Protein Name	Guanine nucleotide exchange C9orf72
UniProt Gene Name	C9orf72

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.