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# PRR5 Antibody

Catalog # ASC11316

## Product Information

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| **Application** | WB, IF, E, IHC-P |
| **Primary Accession** | P85299 |
| **Other Accession** | NP_851850, 31317218 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |
| **Calculated MW** | 42753 |
| **Concentration (mg/ml)** | 1 mg/mL |
| **Conjugate** | Unconjugated |
| **Application Notes** | PRR5 antibody can be used for detection of PRR5 by Western blot at 1 g/mL. Antibody can also be used for immunohistochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL. |

## Additional Information

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| **Gene ID** | 55615 |
| **Other Names** | Proline-rich protein 5, Protein observed with Rictor-1, Protor-1, PRR5, PROTOR1 |
| **Target/Specificity** | PRR5; PRR5 antibody is predicted to not cross-react with other Protor protein family members. |
| **Reconstitution & Storage** | PRR5 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures. |
| **Precautions** | PRR5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | PRR5 |
| **Synonyms** | PROTOR1 |
| **Function** | Associated subunit of mTORC2, which regulates cell growth and survival in response to hormonal signals (PubMed:17461779, PubMed:17599906, PubMed:29424687). mTORC2 is activated by growth factors, but, in contrast to mTORC1, seems to be nutrient-insensitive (PubMed:17461779, PubMed:17599906, PubMed:29424687). mTORC2 seems to function upstream of Rho GTPases to regulate the actin cytoskeleton, probably by activating one |

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| | or more Rho-type guanine nucleotide exchange factors (PubMed:17461779, PubMed:17599906, PubMed:29424687). PRR5 plays an important role in regulation of PDGFRB expression and in modulation of platelet-derived growth factor signaling (PubMed:17599906). May act as a tumor suppressor in breast cancer (PubMed:15718101). |
| **Tissue Location** | Most abundant in kidney and liver. Also highly expressed in brain, spleen, testis and placenta. Overexpressed in several colorectal tumors. |

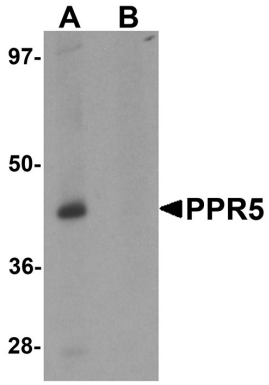
## Background

PRR5 Antibody: Proline-rich protein 5 (PRR5), also known as Protor-1, is a 388 amino acid protein in Protor family, is thought to act as a tumor suppressor in breast and colorectal tumorigenesis. PRR5 is widely expressed and possesses two RICTOR interaction sites and a C-terminal Proline rich region. It promotes Rapamycin complex 2 (mTORC2) activity. There are four isoforms of PRR5 that are produced as a result of alternative splicing events and these isoforms play an important role in the modulation of platelet-derived growth factor signaling and in the regulation of PDGFR-beta expression.

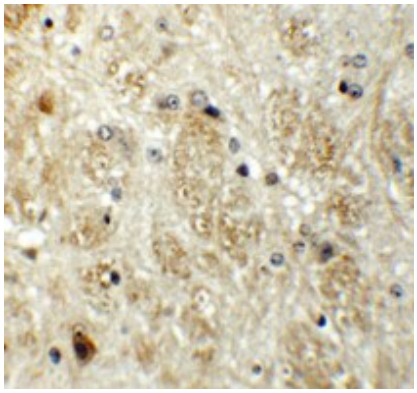
## References

Johnstone CN, Castellvi-Bel S, Chang LM, et al. PRR5 encodes a conserved proline-rich protein predominant in kidney: analysis of genomic organization, expression, and mutation status in breast and colorectal carcinomas. Genomics 2005; 85:338-51.
Pearce LR, Huang X, Boudeau J, et al. Identification of Protor as a novel Rictor-binding component of mTOR complex-2. Biochem. J. 2007; 405:513-22.
Woo SY, Kim DH, Jun CB, et al. PRR5, a novel component of mTOR complex 2, regulates platelet-derived growth factor receptor expression and signaling. J. Biol. Chem. 2007; 282:25604-12.

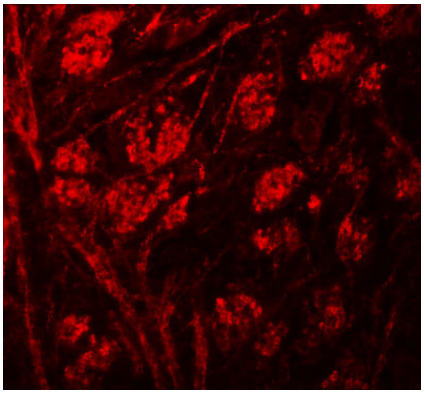
## Images




Western blot analysis of PRR5 in SK-N-SH cell lysate with PRR5 antibody at 1 µg/mL in (A) the absence and (B) the presence of blocking peptide



Immunohistochemistry of PPR5 in mouse brain tissue with PPR5 antibody at 5 µg/mL.



Immunofluorescence of PPR5 in mouse brain tissue with PPR5 antibody at 20 µg/mL.

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