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PARC Antibody

Catalog # ASC10204

Product Information

Application	WB, IF, ICC, E
Primary Accession	Q8IWT3
Other Accession	NP_055904, 24307991
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	281229
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	PARC antibody can be used for the detection of PARC by Western blot at 1 - 2 g/mL. Antibody can also be used for immunocytochemistry starting at 1 g/mL. For immunofluorescence start at 2 g/mL.

Additional Information

Gene ID	23113
Other Names	PARC Antibody: PARC, H7AP1, KIAA0708, PARC, Cullin-9, UbcH7-associated protein 1, CUL-9, cullin 9
Target/Specificity	CUL9;
Reconstitution & Storage	PARC 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	PARC Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CUL9
Synonyms	H7AP1, KIAA0708, PARC
Function	Core component of a Cul9-RING ubiquitin-protein ligase complex composed of CUL9 and RBX1 (PubMed:38605244). The CUL9-RBX1 complex mediates ubiquitination and subsequent degradation of BIRC5 and is required to maintain microtubule dynamics and genome integrity. Acts downstream of the 3M complex, which inhibits the ubiquitination of BIRC5 (PubMed:24793696). The CUL9-RBX1 complex also mediates mono-ubiquitination of p53/TP53 (PubMed:38605244). Acts as a cytoplasmic anchor

	protein in p53/TP53-associated protein complex. Regulates the subcellular localization of p53/TP53 and its subsequent function (PubMed:12526791, PubMed:17332328). Ubiquitinates apurinic/apyrimidinic endodeoxyribonuclease APEX2 (PubMed:38605244). Ubiquitination by the CUL9-RBX1 complex is predominantly mediated by E2 ubiquitin-conjugating enzymes UBE2L3 and UBE2D2 (PubMed:38605244).
Cellular Location	Cytoplasm.
Tissue Location	Ubiquitously expressed in all tissues with highest expression in testis brain and kidney.

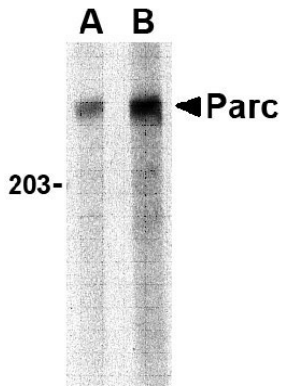
Background

PARC Antibody: The continued localization of p53 to the nucleus is essential for its function as a tumor suppressor. PARC, a large, Parkin-like ubiquitin ligase has recently been identified as a cytoplasmic anchor protein in p53-associated protein complexes. In the absence of stress, PARC inactivation results in nuclear localization of p53 and activation of p53-dependent apoptosis, while overexpression of this protein promoted cytoplasmic sequestration of p53. Surprisingly, PARC knockout mice were viable and exhibited no obvious phenotype, suggesting that other proteins, such as the highly related cullin family of E3 ubiquitin ligases, may perform similar functions in the absence of PARC. Additionally, it has been suggested that p53 binding to PARC may serve to control PARC function.

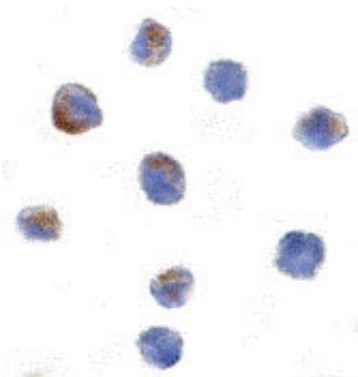
References

Nikolaev AY, Li M, Puskas N, et al. Parc: a cytoplasmic anchor for p53. Cell 2003; 112:29-40.
Skaar JR, Arai T, and DeCaprio JA. Dimerization of CUL7 and PARC is not required for all CUL7 functions and mouse development. Mol. Cell. Biol. 2005; 25:5579-89.

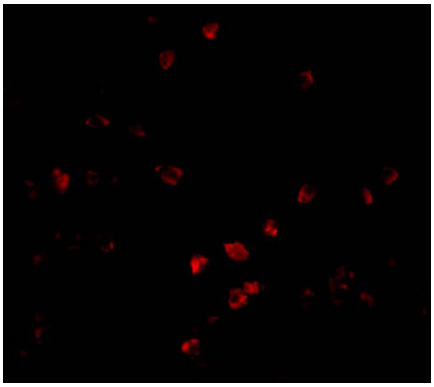
Images



Western blot analysis of PARC in Daudi lysate with PARC antibody at (A) 1 and (B) 2 µg/mL.



Immunocytochemistry of Parc in Daudi cells with Parc antibody at 1 µg/mL.



Immunofluorescence of Bcl-G in Daudi cells with Bcl-G antibody at 2 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.