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DDIT4 Rabbit pAb

Catalog # AP98722

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9NX09
Other Accession	Q9NX09
Reactivity	Rat
Predicted	Pig, Human, Mouse, Rabbit, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	25371
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human DDIT4
Epitope Specificity	165-232/232
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the DDIT4 family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Inhibits cell growth by regulating the TOR signaling pathway upstream of the TSC1-TSC2 complex and downstream of AKT1. Promotes neuronal cell death.

Additional Information

Gene ID	54541
Other Names	Dig2; REDD-1; REDD1; DDIT4_HUMAN; DDIT4; HIF-1 responsive protein RTP801; Protein regulated in development and DNA damage response 1 (REDD-1); RTP801; DNA damage inducible transcript 4; DNA-damage-inducible transcript 4; HIF-1 responsive RTP801
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	DDIT4
Synonyms	REDD1, RTP801

Function	Regulates cell growth, proliferation and survival via inhibition of the activity of the mammalian target of rapamycin complex 1 (mTORC1). Inhibition of mTORC1 is mediated by a pathway that involves DDIT4/REDD1, AKT1, the TSC1-TSC2 complex and the GTPase RHEB. Plays an important role in responses to cellular energy levels and cellular stress, including responses to hypoxia and DNA damage. Regulates p53/TP53-mediated apoptosis in response to DNA damage via its effect on mTORC1 activity. Its role in the response to hypoxia depends on the cell type; it mediates mTORC1 inhibition in fibroblasts and thymocytes, but not in hepatocytes (By similarity). Required for mTORC1-mediated defense against viral protein synthesis and virus replication (By similarity). Inhibits neuronal differentiation and neurite outgrowth mediated by NGF via its effect on mTORC1 activity. Required for normal neuron migration during embryonic brain development. Plays a role in neuronal cell death.
Cellular Location	Mitochondrion. Cytoplasm, cytosol
Tissue Location	Broadly expressed, with lowest levels in brain, skeletal muscle and intestine. Up-regulated in substantia nigra neurons from Parkinson disease patients (at protein level)

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