

CHAC1 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51743

Product Information

Application	WB
Primary Accession	<u>Q9BUX1</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24418

Additional Information

Gene ID	79094
Other Names	Glutathione-specific gamma-glutamylcyclotransferase 1, Gamma-GCG 1, 232-, Blocks Notch protein, Botch, Cation transport regulator-like protein 1, CHAC1 {ECO:0000303 PubMed:19109178, ECO:0000312 HGNC:HGNC:28680}
Target/Specificity	KLH conjugated synthetic peptide derived from human CHAC1
Dilution	WB~~ 1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	CHAC1 {ECO:0000303 PubMed:19109178, ECO:0000312 HGNC:HGNC:28680}
Function	Catalyzes the cleavage of glutathione into 5-oxo-L-proline and a Cys-Gly dipeptide. Acts specifically on glutathione, but not on other gamma-glutamyl peptides (PubMed: <u>27913623</u>). Glutathione depletion is an important factor for apoptosis initiation and execution. Acts as a pro-apoptotic component of the unfolded protein response pathway by mediating the pro-apoptotic effects of the ATF4-ATF3-DDIT3/CHOP cascade (PubMed: <u>19109178</u>). Negative regulator of Notch signaling pathway involved in embryonic neurogenesis: acts by inhibiting Notch cleavage by furin, maintaining Notch in an immature inactive form, thereby promoting neurogenesis in embryos (PubMed: <u>22445366</u>).
Cellular Location	Cytoplasm, cytosol. Golgi apparatus, trans-Golgi network {ECO:0000250 UniProtKB:Q8R3J5}

Background

Negative regulator of Notch signaling pathway involved in embryonic neurogenesis: acts by inhibiting Notch cleavage by furin, maintaining Notch in an immature inactive form, thereby promoting neurogenesis in embryos. May also act as a pro-apoptotic component of the unfolded protein response pathway by mediating the pro-apoptotic effects of the ATF4-ATF3-DDIT3/CHOP cascade.

References

Zody M.C.,et al.Nature 440:671-675(2006). Zheng J.M.,et al.Submitted (JUL-2004) to the EMBL/GenBank/DDBJ databases. Mungrue I.N.,et al.J. Immunol. 182:466-476(2009). Chi Z.,et al.Dev. Cell 22:707-720(2012).

Images



All lanes : Anti-CHAC1 Antibody at 1:1000 dilution Lane 1: Hela whole cell lysates Lane 2: PC-12 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size : 29 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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