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Product datasheet for TA383765M

Apg3 (ATG3) Rabbit Monoclonal Antibody [Clone ID: R06-9E7]

Product data:

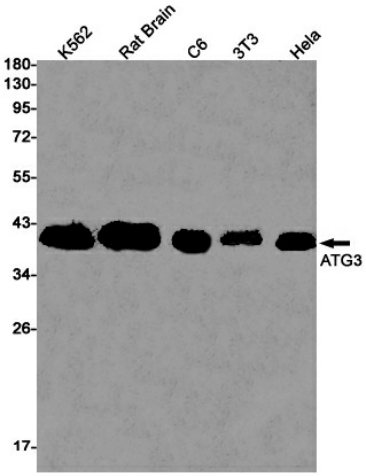
Product Type:	Primary Antibodies
Clone Name:	R06-9E7
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 1/2000-1/10000 IHC: 1/50 ICC/IF: 1/500
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	A synthetic peptide of human ATG3
Formulation:	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Concentration:	lot specific
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Stability:	1 year
Predicted Protein Size:	Calculated MW: 36 kDa; Observed MW: 40 kDa
Gene Name:	autophagy related 3
Database Link:	Entrez Gene 64422 Human Q9NT62

View online »

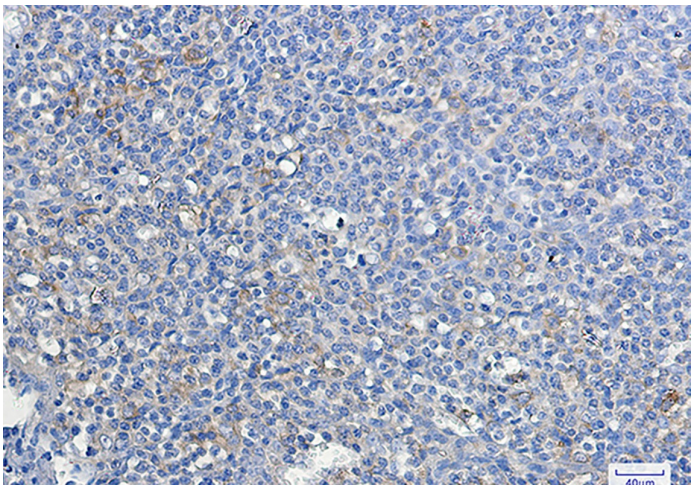
Background: Swiss-Prot Acc.Q9NT62.E2 conjugating enzyme required for the cytoplasm to vacuole transport (Cvt), autophagy, and mitochondrial homeostasis. Responsible for the E2-like covalent binding of phosphatidylethanolamine to the C-terminal Gly of ATG8-like proteins (GABARAP, GABARAPL1, GABARAPL2 or MAP1LC3A). The ATG12-ATG5 conjugate plays a role of an E3 and promotes the transfer of ATG8-like proteins from ATG3 to phosphatidylethanolamine (PE). This step is required for the membrane association of ATG8-like proteins. The formation of the ATG8-phosphatidylethanolamine conjugates is essential for autophagy and for the cytoplasm to vacuole transport (Cvt). Preferred substrate is MAP1LC3A. Also acts as an autocatalytic E2-like enzyme, catalyzing the conjugation of ATG12 to itself, ATG12 conjugation to ATG3 playing a role in mitochondrial homeostasis but not in autophagy. ATG7 (E1-like enzyme) facilitates this reaction by forming an E1-E2 complex with ATG3. Promotes primary ciliogenesis by removing OFD1 from centriolar satellites via the autophagic pathway.

Synonyms: 2610016C12Rik; APG3; APG3-LIKE; APG3L; Apg3p; DKFZp564M1178; FLJ22125; hApg3; MGC15201; PC3-96

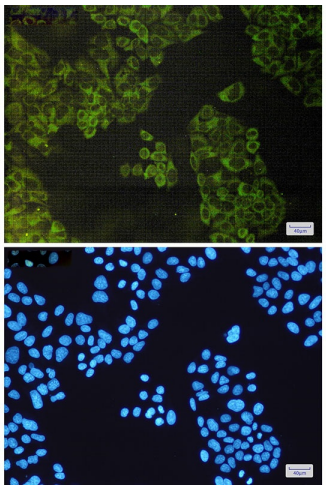
Product images:



Western blot analysis of ATG3 in K562, rat Brain, C6, 3T3, Hela lysates using ATG3 antibody.



Immunohistochemistry analysis of paraffin-embedded Human tonsil using ATG3 antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.



Immunocytochemistry analysis of ATG3(green) in Hela using ATG3 antibody,and DAPI(blue)