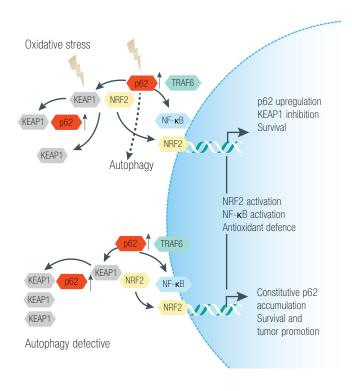
p62

Crown insight

Introduction

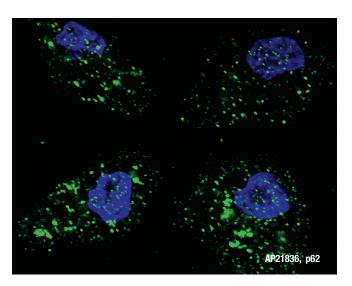
p62 assembles protein complexes that regulate signal transduction. p62 binds the autophagosome protein light chain 3 (LC3; MAP1LC3A), which directs cargo to autophagosomes for degradation. p62 binds TRAF6, which promotes NF-kB activation. p62 also interacts with kelchlike ECH-associated protein 1 (KEAP1), which releases NRF2 and enables it to induce genes involved in antioxidant defence. By virtue of these interactions, p62 has a role in cancer, differentiation, inflammation, metabolism and cell growth. Autophagy defects increase p62 levels and promote some of these pathways, however, accumulation of p62 to high levels causes p62 aggregation that sequesters and inactivates p62-interacting proteins to inhibit some of these pathways.











Fluorescent image of U251 cells stained with SQSTM1 (p62) (C-term) antibody. U251 cells were treated with Chloroquine (50 μ M,16h), then fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.2%, 30 min). Cells were then incubated with AP2183b SQSTM1 (p62) (C-term) primary antibody (1:200, 2 h at room temperature). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:1000, 1h). Nuclei were counterstained with Hoechst 33342 (blue) (10 μ g/ml, 5 min). SQSTM1 (p62) immunoreactivity is localized to autophagic vacuoles in the cytoplasm of U251 cells, supported by Human Protein Atlas Data (http://www.proteinatlas.org/ENSG00000161011).

Selected Abgent Products

•	
Cat.#	TARGET NAME
AP2183b	SQSTM1 (p62) Antibody (C-term)
AP18899b	IKKB Antibody (C-term S689)
AP14584a	PSMC2 Antibody (N-term)
AP19888b	PSMD4 Antibody (C-term)
AP7028a	PKC zeta Antibody (N-term)
AP10092b	KEAP1 Antibody (C-term)
AP20128b	EBI3 Antibody (C-term)
AP19413a	KCNAB1 (N-term)
AP7275d	NFE2L2 Antibody (S40)
AP5929b	ZFAN5 Antibody (C-term)
AP1821a	GABARAP Antibody (N-term)

Visual categorization

Target associated (orange









