

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	p62/SQSTM1 antibodies are ideal for immunocytochemistry colocalization studies in autophagosomes. The unconjugated antibody detects human p62/SQSTM1 in direct ELISAs, and human, mouse and rat p62/SQSTM1 in Western Blots
Source	Monoclonal Mouse IgG ₁ Clone # 864807
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human p62/SQSTM1 Asp368-Leu440 Accession # Q13501
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

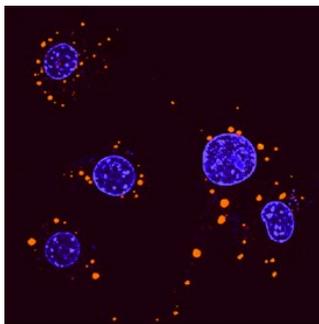
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Immunocytochemistry	8 µg/mL	See Below

DATA

Immunocytochemistry



p62/SQSTM1 in RAW 264.7 Mouse Cell Line. p62/SQSTM1 was detected in formaldehyde fixed RAW 264.7 mouse monocyte/macrophage cell line treated with LPS using Mouse Anti-Human/Mouse/Rat p62/SQSTM1 Biotinylated Monoclonal Antibody (Catalog # BAM8028) at 8 µg/mL overnight at 4 °C. Cells were stained using the NorthernLights™ 557-conjugated Streptavidin (orange; Catalog # NL999) and counterstained with DAPI (blue). Specific staining was localized to autophagosomes. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

SQSTM1 (Sequestrome-1), also known as p62, is a widely expressed, stress-inducible, multifunctional 62 kDa intracellular protein. The 440 amino acid (aa) human SQSTM1 contains multiple adaptor domains that allow interaction with proteins in NGF/NFκB and other signaling pathways (notably TRAF6, atypical protein kinase C family and Src family), polyubiquitin, proteasome subunits and many others. It contains numerous regulatory phosphorylation sites and a dimerization site. SQSTM1 shuttles ubiquitinated proteins to the proteasome and is important in autophagy and apoptosis. Its dysregulation is associated with Paget's disease of bone, Parkinson's and Alzheimer's diseases, and cancers. Within aa 344-440, which includes the ubiquitin-binding domain, human SQSTM1 shares 100% aa sequence identity with mouse and rat SQSTM1.