The chronic focal skeletal disorder, Paget’s disease of bone, affects 2-3% of the population over the age of 60 years. Paget’s disease is characterized by increased bone resorption by osteoclasts, followed by abundant new bone formation that is of poor quality. The disease leads to several complications including bone pain and deformities, as well as fissures and fractures. Mutations in the ubiquitin-associated (UBA) domain of the sequestosome 1 protein (SQSTM1), also designated p62 or ZIP, commonly cause Paget’s disease, since the UBA is necessary for aggregate sequestration and cell survival.

**Genetic locus:** SQSTM1 (human) mapping to 5q35.3.

**SQSTM1 (A-6) is a mouse monoclonal antibody raised against amino acids 151-440 of SQSTM1 of human origin.**

Each vial contains 200 µg IgG1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**Applications**

SQSTM1 (A-6) is recommended for detection of sequestosome 1 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein [1 ml of cell lysate]), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SQSTM1 siRNA (h): sc-29679, SQSTM1 shRNA Plasmid (h): sc-29679-SH and SQSTM1 shRNA (h) Lentiviral Particles: sc-29679-V.

Molecular Weight of SQSTM1: 65 kDa.

Positive Controls: MDA-MB-231 cell lysate: sc-2232, HeLa whole cell lysate: sc-2200 or SK-LMS-1 cell lysate: sc-3813.

**Recommended Secondary Reagents**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2050 or ABC: sc-2017 mouse IgG Staining Systems.

**Storage**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**Data**

SQSTM1 (A-6): sc-48402. Western blot analysis of SQSTM1 expression in SK-LMS-1 (A), MDA-MB-231 (B), SK-BR-3 (C), MCF7 (D) and HeLa (E) whole cell lysates.

SQSTM1 (A-6): sc-48402. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human ovary tissue showing cytoplasmic staining of follicle cells and ovarian stroma cells and and cytoplasmic and nuclear staining of oocytes (B).

**Select Product Citations**


**Research Use**

For research use only, not for use in diagnostic procedures.

**Conjugates**

See SQSTM1 (D-3): sc-28359 for SQSTM1 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.