

Store at  
-20C  
#48046**SQSTM1/p62-like Receptor Antibody Sampler Kit****Orders:** 877-616-CELL (2355)  
orders@cellsignal.com**Support:** 877-678-TECH (8324)**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

1 Kit (5 x 20 microliters)

**For Research Use Only. Not for Use in Diagnostic Procedures.**

Product Includes	Product #	Quantity	Mol. Wt	Isotype/Source
SQSTM1/p62 (D5E2) Rabbit mAb	8025	20 µl	62 kDa	Rabbit IgG
Optineurin (D2L8S) Rabbit mAb	58981	20 µl	75 kDa	Rabbit IgG
NBR1 (D2E6) Rabbit mAb	9891	20 µl	120 kDa	Rabbit IgG
NDP52 (D1E4A) Rabbit mAb	60732	20 µl	52, 60 kDa	Rabbit IgG
TAX1BP1 (D1D5) Rabbit mAb	5105	20 µl	92 kDa	Rabbit IgG
Anti-rabbit IgG, HRP-linked Antibody	7074	100 µl		Goat

Please visit [cellsignal.com](http://cellsignal.com) for individual component applications, species cross-reactivity, dilutions, protocols, and additional product information.**Description**

The SQSTM1/p62-like Receptor Antibody Sampler Kit provides an economical means of detecting members of the SQSTM1/p62-like Receptor (SLR) family. The kit includes enough antibody to perform two western blot experiments with each primary antibody.

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

**Background**

Autophagy is a catabolic process for the autophagosome-lysosomal degradation of bulk cytoplasmic contents (1,2). Selective autophagy targets the degradation of distinct sets of substrates and organelles and can occur through the utilization of a number of autophagy cargo receptors (3-5). Autophagy cargo receptors contain an LC3-interacting region (LIR) required for interaction with Atg8/LC3 family members targeted to the autophagosome. SQSTM1/p62-like receptors (SLRs) are a family of autophagy cargo receptors that contain domains for binding to ubiquitin. This family includes prototypical member SQSTM1/p62, NBR1, NDP52, Optineurin, and TAX1BP1. Targets of SLRs include ubiquitylated protein aggregates (aggrephagy), organelles such as mitochondria (mitophagy) and peroxisomes (pexophagy), and intracellular bacteria (xenophagy).

Upon binding of cargo to these receptors, the complex is delivered to the autophagosome where both the cargo and receptor are degraded through the autophagic process. While some redundancy may exist among SLR family members, they can have unique activities. Many SLRs can have additional roles as scaffolding proteins for various signaling pathways. For example, SQSTM1/p62 interacts with KEAP1, a cytoplasmic inhibitor of NRF2, a key transcription factor involved in cellular responses to oxidative stress (6). Thus, accumulation of SQSTM1/p62 can lead to an increase in NRF2 activity.

**Background References**

1. Reggiori, F. and Klionsky, D.J. (2002) *Eukaryot Cell* 1, 11-21.
2. Codogno, P. and Meijer, A.J. (2005) *Cell Death Differ* 12 Suppl 2, 1509-18.
3. Birgisdottir, Á.B. et al. (2013) *J Cell Sci* 126, 3237-47.
4. Xu, Z. et al. (2015) *Acta Biochim Biophys Sin (Shanghai)* 47, 571-80.
5. Mancias, J.D. and Kimmelman, A.C. (2016) *J Mol Biol* 428, 1659-80.
6. Komatsu, M. et al. (2010) *Nat Cell Biol* 12, 213-23.

**Trademarks and Patents**

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit [cellsignal.com/trademarks](http://cellsignal.com/trademarks) for more information.

**Limited Uses**

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.