



#8665 Store at -20C

Rag and LAMTOR Antibody Sampler Kit

1 Kit (7 x 20 microliters)

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

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

Product Includes	Product #	Quantity	Mol. Wt	Isotype/Source
LAMTOR1/C11orf59 (D11H6) XP [®] Rabbit mAb	8975	20 µl	18 kDa	Rabbit IgG
LAMTOR2/ROBLD3 (D7C10) Rabbit mAb	8145	20 µl	14 kDa	Rabbit IgG
LAMTOR3/MAPKSP1 (D38G5) Rabbit mAb	8168	20 µl	14 kDa	Rabbit IgG
RagA (D8B5) Rabbit mAb	4357	20 µl	30 kDa	Rabbit IgG
RagC (D8H5) Rabbit mAb	9480	20 µl	50 kDa	Rabbit IgG
RagB (D18F3) Rabbit mAb	8150	20 µl	40 kDa	Rabbit IgG
RagD Antibody	4470	20 µl	50 kDa	Rabbit
Anti-rabbit IgG, HRP-linked Antibody	7074	100 µl		Goat

Please visit cellsignal.com for individual component applications, species cross-reactivity, dilutions, protocols, and additional product information.

Description

The Rag and LAMTOR Antibody Sampler Kit is an economical means of detecting various Rag and LAMTOR proteins implicated within mTOR complex signaling. The kit contains enough primary and secondary antibody to perform two western blots with each 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

The mTORC1 complex is a critical regulator of cell growth (1,2). Its activity is modulated by energy levels, growth factors, and amino acids via signaling through Akt, MAPK, and AMPK pathways (3,4). Recent studies found that the four related GTPases, RagA, RagB, RagC, and RagD, interact with raptor within the mTORC1 complex (1,2). These interactions are both necessary and sufficient for mTORC1 activation in response to amino acid signals (1,2). According to the research literature, RagD is one of several genes differentially expressed in human melanoma cell lines and has been considered to be a viable target for further diagnostic and therapeutic study (5). A protein complex consisting of LAMTOR1/C11orf59, LAMTOR2/ROBLD3, and LAMTOR3/MAPKSP1 has been identified to interact with and recruit four Rag GTPases to the surface of lysosomes (6).

Background References

1. Sancak, Y. et al. (2008) *Science* 320, 1496-501.
2. Kim, E. et al. (2008) *Nat Cell Biol* 10, 935-45.
3. Hay, N. and Sonenberg, N. (2004) *Genes Dev* 18, 1926-45.
4. Wullschleger, S. et al. (2006) *Cell* 124, 471-84.
5. de Wit, N.J. et al. (2005) *Br J Cancer* 92, 2249-61.
6. Sancak, Y. et al. (2010) *Cell* 141, 290-303.

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 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.