



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

#9981 Store at -20C

Symplekin Antibody

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

Applications: W, IP	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 141	Source/Isotype: Rabbit	UniProt ID: #Q92797	Entrez-Gene Id: 8189
-------------------------------	-------------------------	-----------------------------------	-------------------------	----------------------------------	-------------------------------	--------------------------------

Product Usage Information

Application

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

Storage

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

Specificity/Sensitivity

Symplekin Antibody recognizes endogenous levels of total symplekin protein. This antibody also cross-reacts with 40 and 55 kDa proteins of unknown origin in some cell lines.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Asp210 of human symplekin protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Symplekin is necessary for 3'-end cleavage and polyadenylation of mRNAs, histone 3'-end processing and polyadenylation in the cytoplasm (1-5). It is thought to act as a scaffolding protein that brings together factors involved in mRNA 3'-end processing (1,2). Symplekin also plays a role in transcription initiation and termination by RNA polymerase II (RNAPII) through bridging the interaction between the polyadenylation machinery and RNAPII (3,6,7). In addition to its role in mRNA 3'-end processing, research studies have shown that symplekin localizes at epithelial cell tight junctions where it may help to regulate tight junction assembly, thereby maintaining the integrity of the epithelial monolayer and cell polarity (8,9).

Background References

1. Takagaki, Y. and Manley, J.L. (2000) *Mol Cell Biol* 20, 1515-25.
2. Mandel, C.R. et al. (2008) *Cell Mol Life Sci* 65, 1099-122.
3. He, X. et al. (2003) *Genes Dev* 17, 1030-42.
4. Dominski, Z. and Marzluff, W.F. (2007) *Gene* 396, 373-90.
5. Barnard, D.C. et al. (2004) *Cell* 119, 641-51.
6. Calvo, O. and Manley, J.L. (2003) *Genes Dev* 17, 1321-7.
7. Moore, M.J. and Proudfoot, N.J. (2009) *Cell* 136, 688-700.
8. Keon, B.H. et al. (1996) *J Cell Biol* 134, 1003-18.
9. Chang, H. et al. (2012) *Histochem Cell Biol* 137, 319-27.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human

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.