



**POLYCLONAL ANTIBODY**

*For research use only. Not for clinical diagnosis.*

**Catalog No. COP-080048**

# P94/calpain 3

## BACKGROUND

Calpain3 is about 94 kDa, but the protein is very unstable when expressed in COS7 cells, so that the 94-kDa full-length band of wild-type calpain3 can be hardly detected and only autolyzed fragments (ca. 55 kDa and 32 kDa, open and closed triangles, respectively) can be detected. In contrast, inactive calpain3:C129S mutant, in which one of active site residues (Cys129) is substituted by Ser to lose proteolytic activity without conformational change, is stable showing the 94-kDa full-length calpain3 band (arrow).

<b>Product type</b>	Primary antibodies
<b>Host</b>	Goat
<b>Source</b>	Serum
<b>Form</b>	Liquid 0.1% NaN <sub>3</sub> as a preservative.
<b>Volume</b>	100 µl
<b>Concentration</b>	
<b>Specificity</b>	
<b>Antigen</b>	synthetic peptide: NH <sub>2</sub> -NTISV DRPVK KKKNK PIIFC-COOH
<b>Isotype</b>	IgG

**Application notes** WB, IP

### Recommended use

### Recommended dilutions

Western blotting: ~1/500 Predicted molecular weight: 94 kDa (55kDa+32kDa)

Optimal dilutions/concentrations should be determined by the end user.

### Staining Pattern

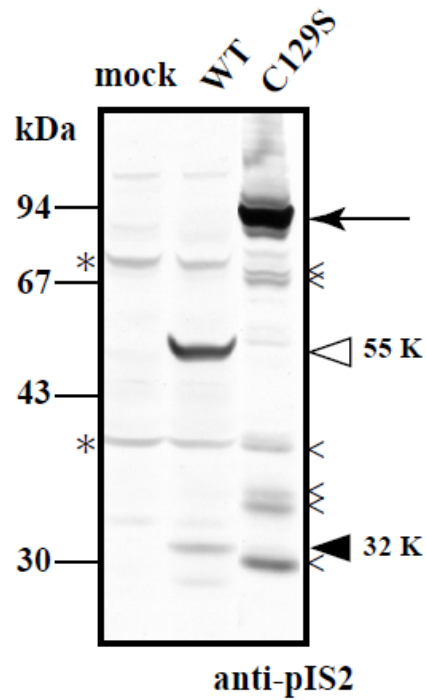
**Cross reactivity** Human, Mouse, Rat

**Storage** Store below -20°C (below -80°C for prolonged storage).

Aliquot to avoid cycles of freeze/thaw.

### References

- 1) Ono, Y., Torii, F., Ojima, K., Doi, N., Yoshioka, K., Kawabata, Y., Labeit, D., Labeit, S., Suzuki, K., Abe, K., Maeda, T., and Sorimachi, H. (2006) Suppressed disassembly of autolyzing p94/CAPN3 in a genetic reportersystem. J. Biol. Chem., 281, 18519-18531. Fig.2A (anti-pIS2)



mock: negative control, total extract of COS7 cells transfected with empty expression vector (pSRD)  
WT: total extract of COS7 cells transfected with a wild-type calpain3 expression vector in pSRD  
C129S: total extract of COS7 cells transfected with a calpain3:C129S inactive mutant expression vector in pSRD

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Manufactured by Operon Biotechnologies, K.K



COSMO BIO Co., LTD.

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TOYO 2CHOME, KOTO-KU, TOKYO, 135-0016, JAPAN

URL: <http://www.cosmobio.co.jp>

e-mail: [export@cosmobio.co.jp](mailto:export@cosmobio.co.jp)

[Outside Japan] Phone : +81-3-5632-9617

[国内連絡先] Phone : +81-3-5632-9610

FAX : +81-3-5632-9618

FAX : +81-3-5632-9619