

#2905 Store at -20°C

IKKε (D20G4) Rabbit mAb


Cell Signaling
TECHNOLOGY®

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.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP	H	Endogenous	80	Rabbit IgG	#Q14164	9641

Product Usage Information	Application Western Blotting Immunoprecipitation	Dilution 1:1000 1:100
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.	
Specificity / Sensitivity	IKKε (D20G4) Rabbit mAb detects endogenous levels of total IKK-epsilon protein. This antibody does not cross-react with other IKKs or with TBK1/NAK.	
Species predicted to react based on 100% sequence homology:	Monkey	
Source / Purification	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val345 of human IKK-epsilon.	
Background	The NF-κB/Rel transcription factors are present in the cytosol in an inactive state, complexed with the inhibitory IκB proteins (1-3). Most agents that activate NF-κB do so through a common pathway based on phosphorylation-induced, proteasome-mediated degradation of IκB (3-7). The key regulatory step in this pathway involves activation of a high molecular weight IκB kinase (IKK) complex whose catalysis is generally carried out by three tightly associated IKK subunits. IKKα and IKKβ serve as the catalytic subunits of the kinase and IKKγ serves as the regulatory subunit (8,9). Activation of IKK depends upon phosphorylation at Ser177 and Ser181 in the activation loop of IKKβ (Ser176 and Ser180 in IKKα), which causes conformational changes, resulting in kinase activation (10-13). Recently, two homologs of IKKα and IKKβ have been described, called IKKε (also known as IKK-i) and TBK-1 (also known as T2K or NAK), and activation of either of these kinases results in NF-κB activation. IKKε contains the kinase domain in its amino terminus, which shares 30% identity to that of IKKα or IKKβ. IKKε is expressed mainly in immune cells, and may play a special role in the immune response (14-18).	
Background References	- Baeuerle, P.A. and Baltimore, D. (1988) <i>Science</i> 242, 540-6. - Beg, A.A. and Baldwin, A.S. (1993) <i>Genes Dev</i> 7, 2064-70. - Finco, T.S. et al. (1994) <i>Proc Natl Acad Sci USA</i> 91, 11884-8. - Brown, K. et al. (1995) <i>Science</i> 267, 1485-8. - Brockman, J.A. et al. (1995) <i>Mol Cell Biol</i> 15, 2809-18. - Traenckner, E.B. et al. (1995) <i>EMBO J</i> 14, 2876-83. - Chen, Z.J. et al. (1996) <i>Cell</i> 84, 853-62. - Zandi, E. et al. (1997) <i>Cell</i> 91, 243-52. - Karin, M. (1999) <i>Oncogene</i> 18, 6867-74. - DiDonato, J.A. et al. (1997) <i>Nature</i> 388, 548-54. - Mercurio, F. et al. (1997) <i>Science</i> 278, 860-6. - Johnson, L.N. et al. (1996) <i>Cell</i> 85, 149-58. - Delhase, M. et al. (1999) <i>Science</i> 284, 309-13. - Shimada, T. et al. (1999) <i>Int Immunol</i> 11, 1357-62. - Peters, R.T. et al. (2000) <i>Mol Cell</i> 5, 513-22. - Tojima, Y. et al. (2000) <i>Nature</i> 404, 778-82. - Bonnard, M. et al. (2000) <i>EMBO J</i> 19, 4976-85. - Peters, R.T. and Maniatis, T. (2001) <i>Biochim Biophys Acta</i> 1471, M57-62.	

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

WB: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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.