

#14970 Store at -20°C

IFI16 (D8B5T) 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, IHC-P	H	Endogenous	85, 95, 98	Rabbit IgG	#Q16666	3428

Product Usage Information

Application

Western Blotting
Immunoprecipitation
Immunohistochemistry (Paraffin)

Dilution

1:1000
1:200
1:200 - 1:800

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.

For a carrier free (BSA and azide free) version of this product see product #89555.

Specificity / Sensitivity

IFI16 (D8B5T) Rabbit mAb recognizes endogenous levels of total IFI16 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro399 of human IFI16 protein.

Background

IFI16 belongs to the PYHIN family, which consists of four members in humans (Aim2, IFIX, MNDA, and IFI16) and at least thirteen members in mice (1). The closest homolog of IFI16 in mice is p204. The PYHIN family is characterized by the presence of one or two HIN-200 domains that bind double stranded DNA and a PYRIN domain that mediates interactions among family members, as well as the inflammasome-forming ASC protein (1). IFI16 also has a nuclear localization signal, but has been observed to bind DNA in both the cytoplasm and nucleus (2,3). There are three isoforms of IFI16 produced by alternative splicing (4). IFI16 is constitutively expressed by some cells, such as lymphocytes, and highly inducible in many others by interferons (5). IFI16 has been shown to directly interact with p53 and to play a role in cellular senescence by modulating p53 activity (6). IFI16 was shown to directly sense intracellular viral DNA, leading to recruitment of STING and activation of IRF-3 and NF-κB (2). Investigators have observed increased levels of IFI16 and anti-IFI16 autoantibodies in patients with systemic lupus erythematosus (7-9).

Background References

1. Keating, S.E. et al. (2011) *Trends Immunol* 32, 574-81.
2. Unterholzner, L. et al. (2010) *Nat Immunol* 11, 997-1004.
3. Kerur, N. et al. (2011) *Cell Host Microbe* 9, 363-75.
4. Johnstone, R.W. et al. (1998) *Biochemistry* 37, 11924-31.
5. Trapani, J.A. et al. (1992) *Immunogenetics* 36, 369-76.
6. Johnstone, R.W. et al. (2000) *Oncogene* 19, 6033-42.
7. Choubey, D. and Panchanathan, R. (2008) *Immunol Lett* 119, 32-41.
8. Mondini, M. et al. (2006) *Arthritis Rheum* 54, 3939-44.
9. Seelig, H.P. et al. (1994) *Arthritis Rheum* 37, 1672-83.

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 **IHC-P:** Immunohistochemistry (Paraffin)

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.

SignalStain is a registered 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.