

Resource Summary Report

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Rabbit Anti-MEK1/2, phospho (Ser221) Monoclonal Antibody, Unconjugated, Clone 166F8

RRID:AB_490903

Type: Antibody

Proper Citation

Cell Signaling Technology Cat# 2338, RRID:AB_490903

Antibody Information

URL: http://antibodyregistry.org/AB_490903

Proper Citation: Cell Signaling Technology Cat# 2338, RRID:AB_490903

Target Antigen: MEK1/2, phospho (Ser221)

Host Organism: rabbit

Clonality: monoclonal

Comments: Applications: W, IHC-P, F. Consolidation on 11/2018: AB_10117717, AB_10120211, AB_490903, AB_490905. Info: Used By NYUIHC-771.
Info: Independent validation by the NYU Lagone was performed for: IHC. This antibody was found to have the following characteristics: Functional in human:TRUE, NonFunctional in human:FALSE, Functional in animal:FALSE, NonFunctional in animal:FALSE

Antibody Name: Rabbit Anti-MEK1/2, phospho (Ser221) Monoclonal Antibody, Unconjugated, Clone 166F8

Description: This monoclonal targets MEK1/2, phospho (Ser221)

Target Organism: rat, mouse, human

Clone ID: Clone 166F8

Antibody ID: AB_490903

Vendor: Cell Signaling Technology

Catalog Number: 2338

Record Creation Time: 20250820T064415+0000

Record Last Update: 20250821T004844+0000

Ratings and Alerts

- Independent validation by the NYU Lagone was performed for: IHC. This antibody was found to have the following characteristics: Functional in human:TRUE, NonFunctional in human:FALSE, Functional in animal:FALSE, NonFunctional in animal:FALSE - NYU Langone's Center for Biospecimen Research and Development <https://med.nyu.edu/research/scientific-cores-shared-resources/center-biospecimen-research-development>

No alerts have been found for Rabbit Anti-MEK1/2, phospho (Ser221) Monoclonal Antibody, Unconjugated, Clone 166F8.

Data and Source Information

Source: [Antibody Registry](#)

Usage and Citation Metrics

We found 29 mentions in open access literature.

Listed below are recent publications. The full list is available at [NIF](#) .

Zhu G, et al. (2026) Accumulated sotorasib-bound KRASG12C reactivates the MAPK pathway and drives sotorasib resistance via the DHX9-RAC1-PAK1 axis. Cell reports, 45(5), 117338.

Kondo Y, et al. (2026) Mechanism of MEK1 phosphorylation by the N-terminal acidic motif-mediated asymmetric BRAF dimer. Molecular cell.

Jasani N, et al. (2025) PHGDH Induction by MAPK Is Essential for Melanoma Formation and Creates an Actionable Metabolic Vulnerability. Cancer research, 85(2), 314.

Yang C, et al. (2025) KRAS4B oncogenic mutants promote non-small cell lung cancer progression via the interaction of deubiquitinase USP25 with RNF31. Developmental cell, 60(12), 1768.

Tsao YC, et al. (2025) Disintegrin Rhodostomin Mutant Ameliorates the Severity of Experimental Proliferative Vitreoretinopathy by Suppressing Both Integrin $\alpha 3$ and $\beta 5$. FASEB journal : official publication of the Federation of American Societies for Experimental Biology, 39(14), e70844.

Stanland LJ, et al. (2025) A first-in-class EGFR-directed KRAS G12V selective inhibitor. Cancer cell.

Wang Q, et al. (2025) Shc1 cooperates with Frs2 and Shp2 to recruit Grb2 in FGF-induced lens development. *eLife*, 13.

Liu X, et al. (2024) The deubiquitinase BAP1 and E3 ligase UBE3C sequentially target IRF3 to activate and resolve the antiviral innate immune response. *Cell reports*, 43(8), 114608.

Sadeghi M, et al. (2024) Biased signaling by mutant EGFR underlies dependence on PKC γ in lung adenocarcinoma. *Cell reports*, 43(12), 115026.

Wang J, et al. (2024) LILRB1-HLA-G axis defines a checkpoint driving natural killer cell exhaustion in tuberculosis. *EMBO molecular medicine*, 16(8), 1755.

Zheng H, et al. (2024) PDGFR α ⁺ITGA11⁺ fibroblasts foster early-stage cancer lymphovascular invasion and lymphatic metastasis via ITGA11-SELE interplay. *Cancer cell*.

Kulkarni A, et al. (2024) Identification of resistance mechanisms to small-molecule inhibition of TEAD-regulated transcription. *EMBO reports*, 25(9), 3944.

Caldi Gomes L, et al. (2024) Multiomic ALS signatures highlight subclusters and sex differences suggesting the MAPK pathway as therapeutic target. *Nature communications*, 15(1), 4893.

Qin X, et al. (2023) An oncogenic phenoscape of colonic stem cell polarization. *Cell*, 186(25), 5554.

Gao X, et al. (2023) Deletion of the tyrosine phosphatase Shp2 in cervical cancer cells promotes reprogramming of glutamine metabolism. *FASEB journal : official publication of the Federation of American Societies for Experimental Biology*, 37(4), e22880.

Ramos Zapatero M, et al. (2023) Trellis tree-based analysis reveals stromal regulation of patient-derived organoid drug responses. *Cell*, 186(25), 5606.

Lockhart JH, et al. (2023) Grading of lung adenocarcinomas with simultaneous segmentation by artificial intelligence (GLASS-AI). *NPJ precision oncology*, 7(1), 68.

Song Z, et al. (2023) Targeting of Annexin A1 in Tumor-associated Macrophages as a therapeutic strategy for hepatocellular carcinoma. *Biochemical pharmacology*, 213, 115612.

Choi YS, et al. (2022) Topical therapy for regression and melanoma prevention of congenital giant nevi. *Cell*, 185(12), 2071.

Klomp JE, et al. (2021) CHK1 protects oncogenic KRAS-expressing cells from DNA damage and is a target for pancreatic cancer treatment. *Cell reports*, 37(9), 110060.