MILLIPORE ANTIBODIES

High-quality, validated antibodies targeted to key research areas

Now that Upstate® and Chemicon® are part of Millipore, we are continuing the tradition of developing innovative antibodies to meet all of your research needs.

Selection

Our broad selection of validated, published antibodies is targeted to key research areas like cell signaling, neuroscience, cell structure, cancer, and epigenetics.

Trust

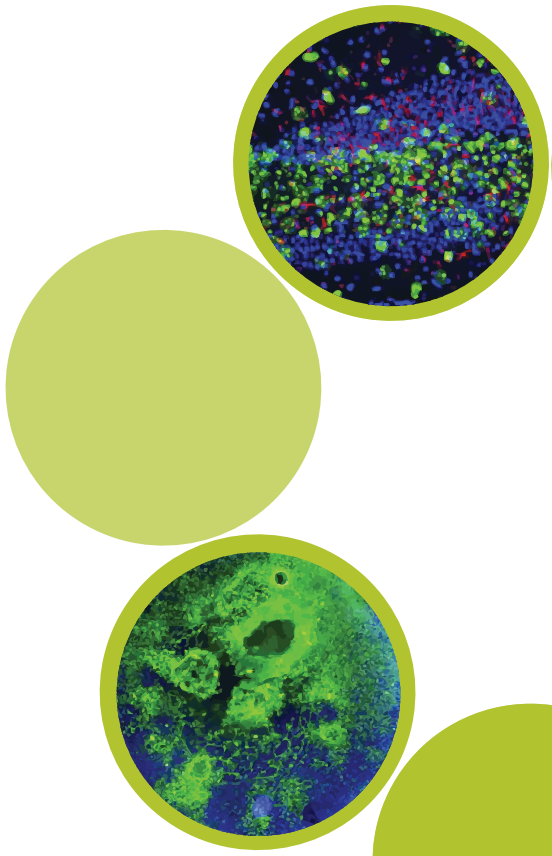
Enjoy complete confidence in your work with proven antibodies from the brands you trust, backed by our quality guarantee.

Expertise

Our knowledgeable technical support scientists are ready to help you with every aspect of your research, from antibody selection to troubleshooting.

More

Our most popular products are listed in this brochure, but you can see our complete selection by visiting Fishersci.com. Check back often – Millipore is constantly developing new antibodies to novel targets.

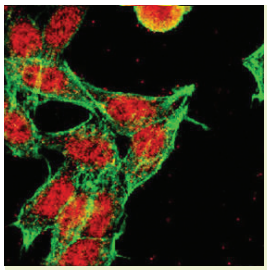


Fisher Scientific

CELL SIGNALING

Tools to help you untangle even the most complicated pathways

With the expertise of Upstate, Millipore offers the broadest portfolio of cell signaling antibodies, enzymes and substrates. Developed over the course of more than two decades, our thousands of cell signaling antibodies include favorites like the anti-phosphotyrosine clone 4G10®, known as the gold standard in tyrosine phosphorylation. Our portfolio also features a heavy emphasis on post-translation modifications, with over 500 phospho-specific antibodies and over 100 antibodies for the detection of methylation, acetylation, and ubiquitylation.



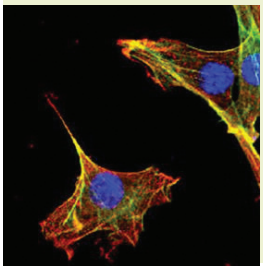


Figure 1.
Anti-ATM staining of HeLa cells;

4G10 Platinum Confocal IF Analysis

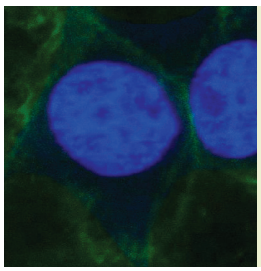


Figure 2a. Untreated
Immunofluorecence
A431 cells either untreated (left) or EGF-treated (right) and stained with 4G10® Platinum (green) and DAPI (nuclei, Blue). Cells were visualized on confocal immunofluorescent microscope.

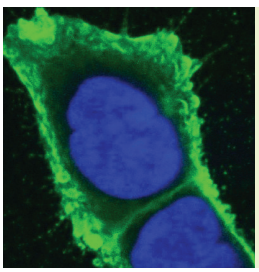


Figure 2b. EGF-treated
Immunofluorecence
A431 cells either untreated (left) or EGF-treated (right) and stained with 4G10® Platinum (green) and DAPI (nuclei, Blue). Cells were visualized on confocal immunofluorescent microscope.

Cell Signaling Antibodies

Description	Qty/Pk	Catalogue No. *
Anti-Active-β-Catenin	100 µg	05-665
Anti-Akt/PKB, PH Domain, clone SKB1	100 µg	05-591
Anti-ATM, Clone AM9	200 µg	05-513
Anti-EGFR	250 µg	05-101
Anti-Erk 1/2	100 µg	06-182
Anti-IRS1	100 µg	06-248
Anti-IRS2	100 µg	06-506
Anti-Erk 1/2	100 µg	06-182
Anti-Lyn	250 µg	06-207
Anti-MAP Kinase 1/2 (ERK 1/2), agarose	50 µg	16-111
Anti-Phospho-ATM (Ser1981)	200 µg	05-740
Anti-Phospho-EGFR	100 µg	05-483
Anti-Phospho-MAP Kinase 1/2 (ERK 1/2), Tyr180	100 µg	06-642
Anti-Phospho-MAP Kinase 1/2 (ERK 1/2)	200 µg	07-467
Anti-Phospho-MAP Kinase 1/2 (ERK 1/2), clone 12D4	100 µg	05-481
Anti-Phospho-STAT5A/B (Tyr694/Tyr699)	100 µg	05-495
Anti-Phospho-Tyrosine, 4G10 Platinum	100 µL	05-321
Anti-Phosphoserine, clone 4A4 (mouse monoclonal IgG1	100 µg	05-1000
Anti-PI3 Kinase, p85	125 µL	06-195
Anti-Rac1, clone 23A	250 µg	05-389

*When ordering antibodies through Fisher Scientific, please add MI to the end of the catalog number.

CELL STRUCTURE

Tools to study cellular function

Our cell structure and adhesion antibody selection is one of the widest on the market today. We provide hundreds of validated antibodies to key targets like integrins, actin, MMPs, CAMs, TIMPs, FAK, Src, Paxillin, and more. We also offer a full complement of proteins, including a variety of extracellular matrices, integrins, and MMPs. Together, these tools can assist in the study of a diverse array of cellular functions, including cellular mobility, invasion, wound healing, tumor growth, cell cycle, differentiation, and angiogenesis.

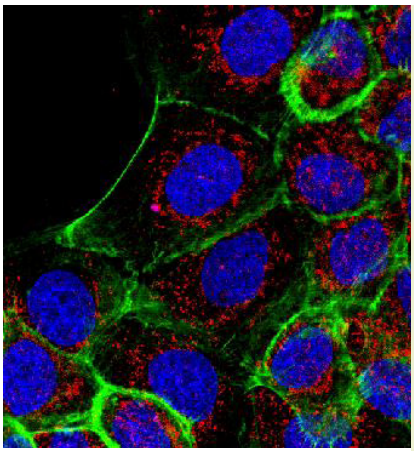


Figure 3.
Confocal immunofluorescent analysis of A431cells using anti-ADAM 17 (TACE) polyclonal antibody (Cat. No. AB19027) and a Cy3 secondary(red), with a nuclear counterstain using DAPI (blue). Actin filaments are labeled with Phalloidin AlexaFluor® 488 (Green).

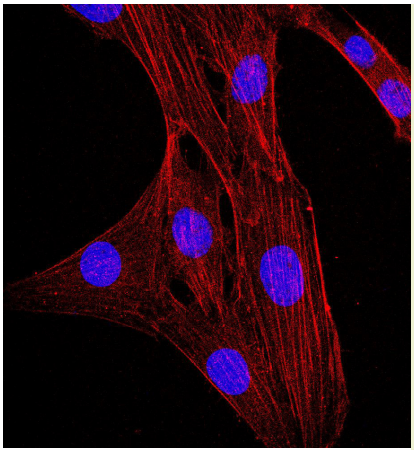


Figure 4.
NIH/3T3 cells probed with anti-actin, clone C4 monoclonal antibody (Cat. No. MAB1501) and a Cy3 secondary(red), with a nuclear counterstain using DAPI (blue). Positive immunofluorescent staining pattern reflects both membrane and cytoplasmic staining.

Cell Structure Antibodies

Description	Qty/Pk	Catalogue No. *
Anti-Actin, clone C4	100 µl	MAB1501
Anti-Actin, near a.a. 50-70, clone C4	100 µg	MAB1501R
Anti-ADAM 17	100 µg	AB19027
Anti-Collagen Type IV	100 µg	AB756P
Anti-Cytokeratin 5, 6, clone D5/16B4	50 µg	MAB1620
Anti-Cytokeratin clone AE1/AE3, recognizes	100 µg	05-483
Acidic and basic cytokeratins	500 µg	MAB3412
Anti-α-Dystroglycan, clone VIA4-1	200 µl	05-298
Anti-Integrin αVβ3, clone LM609	100 µg	MAB1976
Anti-Integrin α5β1, clone JBS5	100 µl	MAB1969
Anti-Integrin α6, clone NKI-GoH3	100 µg	MAB1378
Anti-Integrin β1, clone MB1.2	100 µg	MAB1997
Anti-Integrin β1, activated, clone HUTS-4, azide free	100 µg	MAB2079Z
Anti-Laminin γ2, clone D4B5	100 µg	MAB19562
Anti-MMP-9, catalytic domain	100 µg	AB19016
Anti-Tubulin, β, clone KMX-1	50 µg	MAB3408
Anti-Vimentin, clone V9	40 µg	MAB3400
Anti-von Willibrand Factor	100 µg	AB7356

*When ordering antibodies through Fisher Scientific, please add MI to the end of the catalog number.

CANCER

Tools to track apoptosis and angiogenesis

Millipore's highly-cited cancer research portfolio is centered on apoptosis and angiogenesis, two key processes that are implicated in many aspects of tumor development, growth, and metastasis. With Millipore's selection of cancer-related antibodies and proteins, you'll have the tools you need to better understand the roles that apoptosis and angiogenesis play.

Apoptosis

The disruption of apoptosis, or programmed cell death, is involved in numerous types of cancer, and we have the tools you need to study it. We also provide a broad selection of antibodies to identify important apoptosis targets such as Fas, Bak, Bax, PARP, ssDNA, several caspase enzymes, and key phospho-histones, like H2A.X(pSer139) and H2B(pSer14).

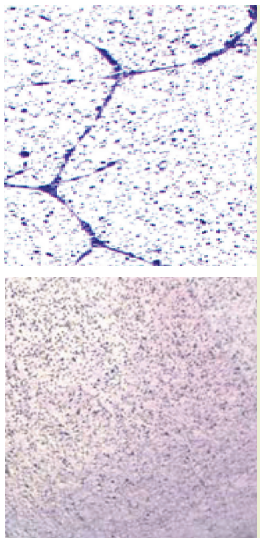


Figure 5.
H2A.X Phosphorylation During Apoptosis Immunofluorescence of HeLa cells using Anti-phospho-Histone H2A.X (Ser139), clone JBW301. Cells were treated with 1 µg/mL Staurosporine for two hours to induce DNA damage and apoptosis.

Apoptosis Antibodies

Description	Qty/Pk	Cat. No.*
Anti-AIF, internal domain	100 µg	AB16501
Anti-BAFF, C-terminus	100 µg	AB16530
Anti-Bak, NT	200 µg	06-536
Anti-Bax, NT	200 µg	06-499
Anti-Bcl-2, clone 100	100 µg	05-729
Anti-Bim, internal epitope, pan-Bim isoforms	100 µg	AB17003
Anti-Caspase 1	200 µg	06-503
Anti-Caspase 2, clone 11B4	100 µg	MAB3507
Anti-Caspase 3, active (cleaved) form	50 µg	AB3623
Anti-Caspase 8	200 µg	06-775
Anti-Cathepsin D	200 µg	06-467
Anti-Cytochrome C, clone C-7	200 µl	05-479
Anti-Clusterin α chain (human), clone 41D	100 µg	05-354
Anti-DNA, single-stranded specific, clone F7-26	50 µg	MAB3299
Anti-Endonuclease G	100 µg	AB3639
Anti-FADD, clone 1F7	100 µg	05-486
Anti-Fas, human, activating, clone CH11	50 µg	05-201
Anti-Fas, human, neutralizing, clone ZB4	100 µg	05-338
Anti-Fractin, C-terminus	100 µl	AB3150
Anti-Phosphatidylserine, clone 1H6	200 µg	05-719
Anti-Phospho-Histone H2A.X (Ser139), clone JBW301	200 µg	05-636
Anti-Phospho-Histone H2B (Ser14), clone MC603	100 µg	05-751
Anti-Poly ADP-ribose, clone 10H	50 µl	MAB3192

*When ordering antibodies through Fisher Scientific, please add MI to the end of the catalog number.

Angiogenesis

Angiogenesis, the formation of new blood vessels, is integral to tumor growth and metastasis. With Millipore's validated in vitro angiogenesis and cell migration assays, you can easily measure endothelial cell proliferation, tube formation, cellular invasion, and migration.

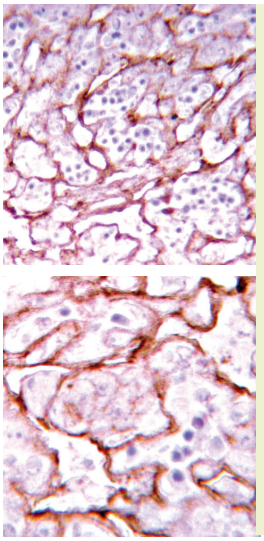


Figure 4. IHC – Paraffin Staining Examples: Optimal Staining of VEGF (Rbt x Ms) Polyclonal Antibody: Mouse Placenta
VEGF (07-1420) antibody staining in mouse placenta, show extensive endothelial cell staining. Tissue is pretreated with citrate buffer, pH 6.0 and exposed to HIER. Antibody dilution is 1:100; Detection is using the IHC-Select detection system with HRP-DAB. Left: low magnification (20X); Right high magnification (40X).

Angiogenesis Antibodies

Description	Qty/Pk	Cat. No.*
Anti-Angiogenin	100 µg	AB10603
Anti-Angiopoietin-1, N-terminus	50 µg	AB3120
Anti-Angiopoietin-2, N-terminus	50 µg	AB3121
Anti-ANGPTL4 (MID)	100 µg	AB10605
Anti-Endoglin, Extracellular, clone MJ7/18	500 µg	CBL1358
Anti-Endostatin, clone 1837.46	200 µl	05-579
Anti-Endoglin, clone P3D1	100 µg	MAB2152
Anti-Endostatin, RBX HU	500 µg	AB1878
Anti-Endostatin, RBX MS	500 µg	AB1880
Anti-Factor VIII, clone GMA-012	100 µg	05-871
Anti-Integrin ĐVĐ3, clone LM609, azide free	100 µg	MAB1976Z
Anti-LYVE-1	100 µl	07-538
Anti-MCAM, clone P1H12	100 µl	MAB16985
Anti-MUC-1, 12-mer epitope, clone VU 3C6	100 µg	CBL263
Anti-Mucin MUC5AC, clone CLH2	100 µg	MAB2011
Anti-Mucin 5B, clone 19.4E	100 µg	MAB3826
Anti-Mucin 5B, clone 15.5B	100 µg	MAB3828
Anti-Nm23, a.a. 86-102	100 µg	CBL446
Anti-PECAM-1, clone P2B1	100 µg	MAB2148
Anti-PECAM-1, clone TLD-3A12, azide free	100 µg	MAB1393Z
Anti-PECAM-1, domains 3-6 of human PECAM-1, clone HC1/6	100 µg	CBL468
Anti-Placental Alkaline Phosphatase, clone 8B6	100 µg	CBL207
Anti-Plasminogen/Angiostatin, clone GMA-016	100 µg	05-863
Anti-PSMA, C-Term, RB X,	100 µg	AB10614
Anti-S-100	100 µl	AB941
Anti-VE-Cadherin, extracelluar domain, trypsin sensitive, clone BV6	100 µg	MAB1989
Anti-VEGF	50 µg	07-1420
Anti-von Willibrand Factor	100 µg	AB7356
Anti-von Willibrand Factor, clone 21-43	500 µl	MAB3442
Anti-vWF(von Willebrand Factor), clone G		05-861

*When ordering antibodies through Fisher Scientific, please add MI to the end of the catalog number.

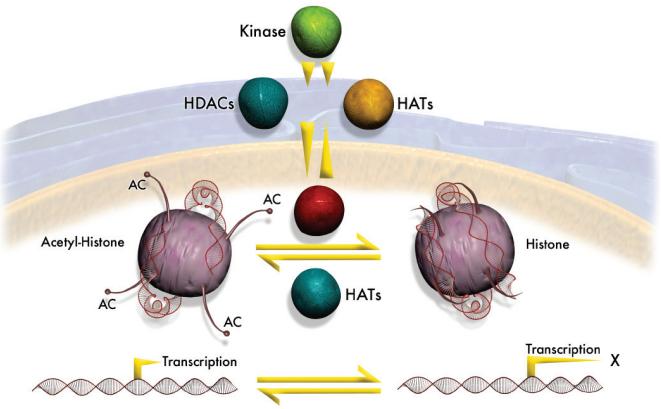
EPIGENETICS

Tools to analyze nuclear function

Millipore offers a wide range of tools for epigenetic research. With antibodies to site-specific histone modifications and ChIPAb+ sets for easy chromatin immunoprecipitation, Millipore's epigenetics selection will help you perform state-of-the-art research into nuclear function, DNA replication and repair, and cell cycles.

Histone Antibodies

Millipore is proud to provide the largest selection of antibodies to site-specific histone modifications. These highly validated antibodies recognize specific modifications including methylation, acetylation, ubiquitinylation, and phosphorylation.



Chromatin and Histone Antibodies

Description	Qty/Pk	Cat. No. *
Protein A Agarose, ChIP Grade		16-157
Protein G Agarose, ChIP Grade		16-201
Magna GrIP™ Magnetic Rack		20-400
Anti-Phospho-Histone H2AX (SER139)	200 µg	07-164
Anti-Phospho-Histone H2A.X (S139)	200 µg	05-636
Anti-Histone H3, CT, pan	100 µL	07-690
Anti-Acetyl Histone H3	200 µg	06-599
Anti-Acetyl Histone H3 (Lys 9)	200 µg	06-942
Anti-Dimethyl-Histone H3 (Lys 9)	100 µg	07-441
Anti-Dimethyl-Histone H3	200 µL	07-030
Anti-Phospho-Histone H3 Mitosis Marker	200 µg	06-570
Anti-Trimethl-Histone H3 (Lys 9)	100 µg	07-442
Anti-Trimethl-Histone H3 (Lys 27)	200 µg	07-449
Anti-Histone H4, pan	200 µg	07-108
Anti-Histone H4, pan	100 µL	05-858
Anti-Acetyl-Lysine	100 µL	06-933
Anti-Androgen Receptor	100 µL	06-680
Anti-Beta Catenin	100 µg	05-665
Anti-Bmi-1, Clone F6	100 µg	05-637
Anti-CREB	200 µg	06-863
Anti-Phospho-CREB (Ser133)	200 µg	05-807
Anti-Phospho-CREB (Ser133)	200 µL	06-519
Anti-CTCF	200 µL	07-729
Anti-HIF-1 Alpha	100 µg	MAB5382
Anti-NF Kappa B, P65	100 µg	MAB3026
Anti-Phospho-FKHRL1 / FOXO3A (Thr32)	100 µL	07-695
Anti-Phospho-SMAD2, RBX	100 µL	AB3849
Anti-Phospho-STAT5A/B (Tyr694/Tyr699)	100 µg	05-495
Anti-REST	200 µg	07-579
Anti-RNA Polymerase II, Clone CTD4H8	200 µg	05-623
Anti-Sirt 1	200 µg	07-131
Anti-SOX-9	100 µg	AB5535
Anti-SP1	200 µg	07-645
Anti-TCF-4, CLONE 6H5-3	200 µg	05-511
Anti-UBIQUITIN, MS X	100 µL	MAB1510

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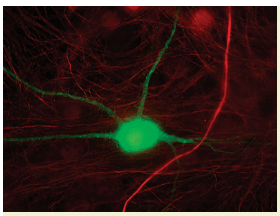
NEUROSCIENCE

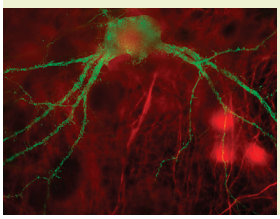
Tools to advance brain research

Brought to you from the expertise of Chemicon, our vast antibody portfolio includes everything from pathway, cell type and state-specific antibodies to neurological disease markers. Antibodies for every major disease and research area within neuroscience are available from our well supported and rapidly growing line, including popular targets such as Alzheimer precursor protein, NeuN, and tyrosine hydroxylase. Our breadth of product line includes antibodies in the following research areas:

- Circadian rhythm and sleep
- Developmental neuroscience
- Growth cones and axon guidance
- Hormones and receptors
- CNS control of metabolism
- Ion channels and transporters
- Neural stem cell migration
- Neurochemistry and neurotrophins
- Neurodegenerative diseases
- Neurotransmitters and receptors
- Oxidative stress
- Reward and addiction
- Neurofilament and neuron metabolism
- Neuroinflammation and pain
- Neuronal and glial markers
- Neuroregenerative medicine
- Sensory and PNS
- Signaling neuroscience
- Synapse and synaptic biology
- Vesicular trafficking



A. Rabbit anti-Tyrosine Hydroxylase (Catalogue No. AB152) localization of tyrosine hydroxylase in culture of primary neurons. Photo courtesy of Dr. Mehdi Doroudchi, Avigen.



B. Anti-Tyrosine Hydroxylase (TH) staining in mouse primary neural cultures using AB152 shown with an FITC fluorescent secondary (green). Fixation was 4% PFA and the primary antibody incubation was 1:1000, overnight at 4°C.

Neuroscience Antibodies

Description	Qty/Pk	Cat. No. *
Anti-NeuN, clone A60	500 µg	MAB377
Anti-Alzheimer Precursor Protein A4, a.a. 66-81 of APP (N-terminus), clone 22C11	50 µg	MAB348
Anti-NG2 Chondroitin Sulfate Proteoglycan	500 µg	AB5320
Anti-Tyrosine Hydroxylase	100 µL	AB152
Anti-O4, clone 81 (also referred to as mAB O4)	50 µg	MAB345
Anti-Polysialic Acid-NCAM, clone 2-2B	50 µL	MAB5324
Anti-MAP2	100 µL	AB5622
Anti-Glial Fibrillary Acidic Protein, clone GA5	40 µg	MAB3402
Anti-Choline Acetyltransferase	500 µL	AB144P
Anti-Tyrosine Hydroxylase, clone LNC1	100 µL	MAB318
Anti-Glutamate Receptor 2, extracellular, clone 6C4	100 µg	MAB397
Anti-FBX2, clone 5B10.2	100 µg	MAB2215
Anti-HCN3	25 µg	AB9818
Anti-Glial Fibrillary Acidic Protein	50 µL	AB5804
Anti-Vesicular Glutamate Transporter 1	50 µL	AB5905
Anti-Synuclein, alpha	50 µL	AB5038
Anti-Dopamine Transporter, N-terminus, clone DAT-Nt	100 µL	MAB369
Anti-Calcium Channel, voltage gated alpha 1C	200 µL	AB5156
Anti-Calcium Channel, voltage gated alpha 1D	200 µL	AB5158
Anti-Sodium Channel, voltage gated, brain type II	200 µL	AB5206
Anti-Amyloid, beta 1-42	500 µg	AB5078P
Anti-Tau-1, clone PC1C6	100 µg	MAB3420
Anti-Huntingtin Protein, a.a. 181-810, clone 1HU-4C8	100 µL	MAB2166
Anti-Huntingtin Protein, clone mEM48	100 µL	MAB5374
Anti-Nitrotyrosine, clone 1A6	100 µg	05-233
Anti-Prion Protein, a.a. 109-112, clone 3F4	100 µg	MAB1562
Anti-NeunSp NeuN, biotin conjugated	500 µg	MAB377B
Anti-Musashi-1	100 µg	AB5977
Anti-Olig-2	100 µL	AB9610
Anti-Trka	200 µg	06-574

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MILLIPORE

For technical assistance, contact Millipore:
1-800-MILLIPORE (1-800-645-5476)
E-mail: **tech_service@millipore.com**

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