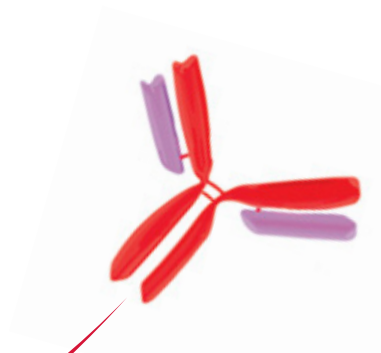


# Remark(Ab)le

## Cell Signaling Antibodies

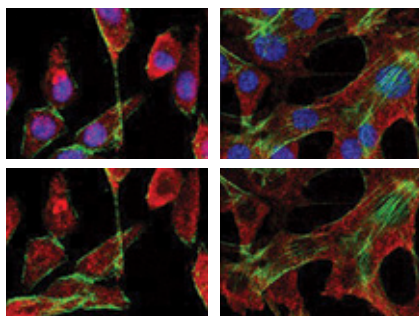
Could an antibody be famous? We think so. Our rock stars include phospho-Tyrosine (4G10<sup>®</sup>). Thousands of citations withstanding the test of time.

Despite the intricate nature of cell signaling networks, the success of cell signaling research still depends largely on the quality, sensitivity, and specificity of the antibodies used for detection and the small molecules used to induce or block modifications in enzyme activities. As a leading provider of these tools and a steadfast partner in research, EMD Millipore is advancing life science research and therapeutic development.



Validated Antibodies  
for Key Research Areas:

- Cancer
- Cell Signaling ✓
- Cell Structure
- ChIPAb+™/RIPAb+™
- Chromatin-Associated
- Epigenetics
- Neuroscience
- Stem Cell



Confocal immunocytochemistry fluorescent analysis of HeLa cells (left) and NIH/3T3 cells (right) using mouse Anti-Glyceraldehyde-3-Phosphate Dehydrogenase Ab, clone 6C5 (MAB374, red). Actin filaments labeled with Alexa Fluor<sup>®</sup> 488 Phalloidin (green). Nuclear staining with DAPI (blue).

# Primary Antibodies for Cell Signaling Research

The basic principle that underlies all immunochemical techniques is that a specific antibody will combine with its target antigen to generate an exclusive antibody-antigen complex. The specificity of primary antibodies, ideally monoclonal antibodies, enables them to be used for the initial detection of the target of interest in the study of cellular pathways and mechanisms, be they native or disrupted by disease states.

Primary Antibody	Species Reactivity	Key Applications	Host	Format	Type	Cat. No.
<b>4G10® Platinum, Anti-Phosphotyrosine (mouse monoclonal cocktail IgG<sub>2b</sub>)</b>	A	ELISA, FC, IC, IF, IH, IP, WB	M	Purified	Mono	05-1050
<b>Anti-EGFR</b>	Ht, H, M, R	IP, WB	Rb	Purified	Poly	06-847
<b>Anti-GLUT-1, CT</b>	H, M, R	ELISA, IC, IH(P), WB	Rb	Affinity purified	Poly	07-1401
<b>Anti-Glyceraldehyde-3-Phosphate Dehydrogenase, clone 6C5</b>	Ca, F, Fe, H, M, Po, R, Rb	ELISA, IC, IF, IH, IP, WB	M	Purified	Mono	MAB374
<b>Anti-IRS1</b>	H, M, R	IP, WB	Rb	Affinity purified	Poly	06-248
<b>Anti-N1-Phosphohistidine (1-pHis), clone SC1-1</b>	<i>E. coli</i> , H	DB, IAP, ICC, WB	Rb	Purified	Mono	MABS1330
<b>Anti-N1-Phosphohistidine (1-pHis), clone SC50-3</b>	<i>E. coli</i> , H	DB, WB	Rb	Purified	Mono	MABS1341
<b>Anti-N3-Phosphohistidine (3-pHis), clone SC39-6</b>	<i>E. coli</i> , H	WB	Rb	Purified	Mono	MABS1351
<b>Anti-N3-Phosphohistidine (3-pHis), clone SC56-2</b>	<i>E. coli</i> , H	DB, WB	Rb	Purified	Mono	MABS1352
<b>Anti-Nitrotyrosine</b>	A	IC, IH, IP, WB	Rb	Purified	Poly	06-284
<b>Anti-Nitrotyrosine, clone 1A6</b>	Vrt	IC, IH, IP, WB	M	Purified	Mono	05-233
<b>Anti-Phosphoserine</b>	A	ELISA, IH, IP, WB	Rb	Affinity purified	Poly	AB1603
<b>Anti-Phosphoserine, clone 4A4 (mouse IgG<sub>1</sub>)</b>	Vrt	ELISA, FC, IF, IH(P), WB	M	Purified	Mono	05-1000
<b>Anti-Phosphotyrosine, 4G10® Platinum</b>	A	ELISA, FC, IC, IF, IH, IP, WB	M	Purified	Mono	05-1050X
<b>Anti-Phosphotyrosine, clone 4G10®</b>	A	IC, IH, IP, WB	M	Purified	Mono	05-321
<b>Anti-Phosphotyrosine, clone 4G10®</b>	Vrt	IC, IH, IP, WB	M	Purified	Mono	05-321X
<b>Anti-PP2A, C subunit, clone 1D6</b>	B, H, M, R, Rb, <i>S. cerevisiae</i> , Xn	WB, IC, IP, WB	M	Purified	Mono	05-421
<b>Anti-Prosurfactant Protein C (proSP-C)</b>	H, M, R	ELISA, IH, IH(P), WB	Rb	Serum	Poly	AB3786
<b>Anti-Rac1, clone 23A8</b>	H, M, R	IH, IP, WB	M	Purified	Mono	05-389
<b>Anti-TCF-4, clone 6H5-3</b>	H, M	EMSA, IC, IH, IP, WB	M	Purified	Mono	05-511
<b>Anti-Ubiquitin, clone Ubi-1 (aka 042691GS)</b>	H, M, R	IH(P), IP, WB	M	Ascites	Mono	MAB1510
<b>Anti-Ubiquitin, Lys48-Specific, clone Apu2, rabbit monoclonal</b>	H, M, R, Rb	CFA, FC, IC, IH, IP, WB	Rb	Purified	Mono	05-1307
<b>Anti-Ubiquitin, Lys63-Specific, clone Apu3, rabbit monoclonal</b>	H, M, R, Rb	CFA, IC, IH, IP, WB	Rb	Purified	Mono	05-1308
<b>Anti-Ubiquitinated proteins, clone FK2</b>	A	ELISA, IF, IP, WB	M	Purified	Mono	04-263

For a complete offering of antibodies for cell signaling research, please visit:

[www.emdmillipore.com/cellsignaling](http://www.emdmillipore.com/cellsignaling)

# Secondary Antibodies for Cell Signaling Research

Secondary antibodies are often used to amplify the detection of an antigen that a primary antibody is first bound to. It is therefore important to select a secondary antibody that has specificity for the species and isotype of the primary antibody. In addition, the secondary antibody must be conjugated to a suitable tag or label for optimal detection.

Secondary Antibody	Species Reactivity	Key Applications	Host	Isotype	Conj.	Cat. No.
Anti-Green Fluorescent Protein	Vrt	ELISA, IC, IH, WB	Rb			AB3080
Anti-Myc Tag, clone 4A6	H	ChIP-seq, IC, IF, IP, WB	M	IgG		05-724
Anti-SBP-tag, clone 20	H	IC, WB	M	IgG <sub>1κ</sub>		MAB10764
Donkey Anti-Goat IgG, HRP conjugate, Species Adsorbed	Gt	ELISA, IH, WB	Dk	IgG	HRP	AP180P
Donkey Anti-Mouse IgG, FITC conjugate, Species Adsorbed	M	IF	Dk	IgG	FITC	AP192F
Donkey Anti-Mouse IgG, HRP conjugate, Species Adsorbed	M	ELISA, WB	Dk	IgG	HRP	AP192P
Donkey Anti-Rabbit IgG, HRP conjugate, Species Adsorbed	Rb	ELISA, WB	Dk	IgG	HRP	AP182P
Goat Anti-Human Ig κ chain, HRP conjugate, Species Adsorbed	H	ELISA	Gt	IgK	HRP	AP502P
Goat Anti-Human IgA, α-Chain Specific Alkaline Phosphatase Conjugate	H	EIA, IEP	Gt	IgA	Alk Phos	401132-1ML
Goat Anti-Human IgG, heavy and light chains	H	IP	Gt	IgG		AB22-2ML
Goat Anti-Mouse IgG, (H+L) FITC Conjugated	M	IF	Gt	IgG	FITC	AP124F
Goat Anti-Mouse IgG, Alkaline Phosphatase conjugate	M	ELISA, WB	Gt	IgG	Alk Phos	AP124A
Goat Anti-Mouse IgG, F(ab') <sub>2</sub> , FITC conjugate	M	IF	Gt	IgG	FITC	AQ303F
Goat Anti-Mouse IgG, HRP conjugate	M	ELISA, IH, WB	Gt	IgG	HRP	12-349
Goat Anti-Mouse IgG, HRP conjugate, Species Adsorbed	M	ELISA, WB	Gt	IgG	HRP	AP181P
Goat Anti-Mouse IgG, Peroxidase Conjugated, H+L	M	ELISA, IH, WB	Gt	IgG	HRP	AP124P
Goat Anti-Rabbit IgG, HRP-conjugate	Rb	ELISA, IH, WB	Gt	IgG	HRP	12-348
Goat Anti-Rabbit IgG, Peroxidase Conjugated	Rb	ELISA, IH, WB	Gt	IgG	HRP	AP132P
Goat Anti-Rabbit γ-Globulin	Rb	IEP, RIA	Gt	IgG		539844-125U
His•Tag® Monoclonal		IP, IL, WB		IgG1		70796-3
Mouse Anti-Human IgG, Fc, all subclasses, clone MK1A6	H	ELISA, IF, HI, IH	M	IgG1		CBL101
Normal Rabbit IgG		IP, WB	Rb	IgG		12-370
Rabbit Anti-Goat IgG, HRP conjugate	Gt	ELISA, IH, WB	Rb	IgG	HRP	AP106P
S•Tag™ Monoclonal		IB, IF, IP		IgG <sub>2b</sub>		71549-3

For a complete offering of antibodies for cell signaling research, please visit:  
[www.emdmillipore.com/cellsignaling](http://www.emdmillipore.com/cellsignaling)

# Small Molecules for Cell Signaling Research

Chemical genetics, in which function is disrupted using small molecules, can shed light on specific disease state mechanisms. Small-molecule compounds, including inhibitors, activators, and other pathway modulators, are critical cellular transduction research tools.

Small Molecule Inhibitor or Activator	Cat. No.
InSolution™ Y-27632	688001
Ionomycin, Calcium Salt, <i>Streptomyces conglobatus</i>	407952
Leupeptin, Hemisulfate, Microbial	108975
PAD Inhibitor, Cl-amidine	506282
PERK Inhibitor I	516535
Phosphatase Inhibitor Cocktail Set II	524625
Protease Inhibitor Cocktail Set I	539131
Protease Inhibitor Cocktail Set III	539134
Rho Kinase Inhibitor	555550
Y-27632	688000

## LEGEND:

**Species:** A=all, Am=amphibian, Av=avian, B=bovine, Ca=canine, Ch=chicken, Chp=chimpanzee, Dk=donkey, Dr=drosophila, Eu=eukaryote, F=fish, Fe=feline, Fg=frog, Ft=ferret, Gp=guinea pig, Gt=goat, Ht=hamster, H=human, Lz=lizard, Ma=mammal, Mk=monkey, Ml=mollusk, M=mouse, Op=opossum, Pl=green plant, Pm=primate, Po=pig, R=rat, Rb=rabbit, RMk=Rhesus macaque, Sal=salamander, Sh=sheep, Sqd=squid, Su=sea urchin, T=tetrahymena, Vo=vole, Vrt=vertebrate, Xn=xenopus, Zf=zebrafish

**Applications:** CFA=cell function assay, CHIP=chromatin immunoprecipitation, ChIP-seq=chromatin immunoprecipitation sequencing, DB=dot blot, EIA=enzyme immunoassay, EMSA=electrophoretic mobility shift assay, FC=flow cytometry, FUNC=affects function, HI=hemagglutination inhibition, IAP=immunoaffinity purification, IB=immunoblotting, IC=immunocytochemistry, IEP=immunoelectrophoresis, IF=immunofluorescence, IH=immunohistochemistry, IH(P)=immunohistochemistry (paraffin), IL=immunolocalization, IP=immunoprecipitation, Mplex=multiplexing, NEUT=neutralizing, PIA=peptide inhibition assay, RIA=radioimmunoassay, RIP=RNA immunoprecipitation, WB=western blotting

**Format:** Alk Phos=alkaline phosphatase, CS=culture supernatant

**Type:** Mono=monoclonal antibody, Poly=polyclonal antibody

**Isotype:** IgA=immunoglobulin A, IgG=immunoglobulin G, IgK=immunoglobulin K

**Conjugation:** Alk Phos=alkaline phosphatase, FITC=fluorescein isothiocyanate, HRP=horseradish peroxidase



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