# **ROCKLAND**

# **CELL BIOLOGY ANTIBODIES**

Rockland offers an extensive collection of cell biology antibodies, encompassing core research areas, including signal transduction, cancer, neuronal research, developmental processes, cell structure, mitosis, DNA modification, and more. Our antibodies are developed and multi-assay validated in-house, ensuring specific and repeatable results.

# **CELL CYCLE & CHECKPOINT CONTROL ANTIBODIES**

Our cell cycle antibodies are produced from hyper-immune serum and generated against the superfamily of proteins regulating the eukaryotic cell cycle, including cyclins, Cyclin Dependent Kinases (CDKs), and Tumor Suppressor Proteins (TSPs).

Product	Size
Cyclin Antibody Sampler Kit (K911) <sup>1</sup>	1 Kit
Cyclin Dependent Kinase Antibody Sampler Kit (K912)²	1 Kit
Apolipoprotein A-1 (GOAT) Antibody (600-101-196)	lmg
BrdU (MOUSE) [29G6.E8 lambda] Antibody (200-301-H50)	100 µg
Laminin (RABBIT) Antibody (600-401-116-0.5)	500 µg
p53 (MOUSE) [BP53-12 lgG2a kappa] Antibody (200-301-174) <sup>3</sup>	100 µg

<sup>1</sup>Anti-Cyclin A, Anti-Cyclin B1, Anti-Cyclin D1, Anti-Cyclin E available individually.

<sup>2</sup>Anti-CDC2 (p34), Anti-CDK2, Anti-CDK4, Anti-CDK5, Anti-CDK9 (PITALRE) available individually. <sup>3</sup>Additional p53 modification sites available.

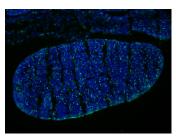


Figure 1. IF microscopy using Anti-BrdU (200-301-H50) (green) in OCT-embedded E10.5 mouse embryo with 20X magnification.

# APOPTOSIS ANTIBODIES

We produce a number of primary antibodies for apoptosis that can facilitate, block, or slow down the process of pre-programmed cell death, including antibodies to caspases, pro-caspase regulation, and Inhibitor of Apoptosis (IAP) family proteins.

Product	Size
BCL-2 (RABBIT) Antibody (200-401-Z43)	100 µg
SUMO (Yeast) (RABBIT) Antibody (200-401-428)	500 µg
Caspase-3 (RABBIT) Antibody (600-401-AD2)'	100 µg
McI-1 (RABBIT) Antibody (600-401-394)	100 µg
PARPI (N-term ZFI) (RABBIT) Antibody (200-401-GM8)	100 µg
Apoptosis Inducing Factor (AIF) (RABBIT) Antibody (200-401-985)	100 µg

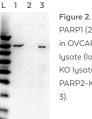


Figure 2. WB using Anti-PARPI (200-401-GM8) in OVCAR-8 wild type Iysate (lane 1), PARPI-KO Iysate (lane 2), and PARP2-KO Iysate (lane 3).

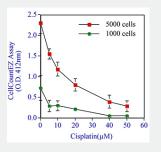
<sup>1</sup>Additional initiator and executioner caspases available.



#### Cell Survival Assay Kits

Rockland has partnered with the Lankenau Institute of Medical Research (LIMR) to offer a variety of cell survival assay kits.

- CellCountEZ<sup>™</sup> Cell Survival Assay Kit (KLD-001)
  Figure 3. (Shown on right) 24-hour treatment with 0-50 µM of Cisplatin on human colon cancer cells HCT116 in a 96-well plate.
- Oxphos™ Cell Survival Assay Kit (KLD-002)
- RadChemDosi™ Cell Survival Assay Kit (KLD-003)
- Intracellular ThioIEZ™ Cell Survival Assay Kit (KLD-004)



#### SIGNAL TRANSDUCTION ANTIBODIES

Our antibodies assist in the research of pathways that govern basic cellular activities and coordinate cell actions through a complex coordination of responses to the cellular microenvironment. These antibodies include AKT, c-MET, HER2, NF- B, NOTCH, p53, PD1/PDL1, Ras-Raf-MEK-ERK, STAT, and TNF.

Product	Size
AKT Phospho S473 (MOUSE) [17F6.B11 IgG1 kappa] Antibody (200-301-268)	100 µg
STAT3 pY705 (RABBIT) Antibody (600-401-C64)	100 µg
NOTCH1 (Cleaved N Terminal) (RABBIT) Antibody (100-401-407)	200 µL
c-MET pY1349/pY1356 (RABBIT) Antibody (600-401-989)	100 µg
NF-kB p65 (Rel A) pS276 (RABBIT) Antibody (100-401-264)	100 µL
PD-1 (RABBIT) Antibody (600-401-DK2)	100 µg
MEK1 C-Term (MOUSE) [13B6.G12 IgG1 kappa] Antibody (200-301-GQ0)	100 µg
TNF- (RABBIT) Antibody (209-401-306-0100)	100 µL

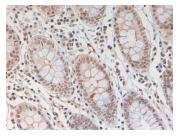


Figure 4. IHC using Anti-STAT3 pY705 (600-401-C64) in formalin-fixed paraffinembedded human colon tissue at pH 9.

# EXTRACELLULAR MATRIX (ECM) ANTIBODIES

The ECM is composed of various secreted molecules and fibrillar proteins consisting of collagens, fibronectin, and laminin. Our collagen antibodies are designed with specificity to recognize only non-denatured, three-dimensional epitopes, which work best with assays that maintain native collagen structure.

Product	Size
Collagen Type I (RABBIT) Antibody (600-401-103-0.5)	500 µg
Collagen Type II (RABBIT) Antibody (600-401-104-0.1)	100 µg
Collagen Type III (RABBIT) Antibody (600-401-105-0.5)	500 µg
Collagen Type IV (RABBIT) Antibody (600-401-108-0.5)	500 µg
Fibronectin (RABBIT) Antibody (600-401-117-0.5)	500 µg
Laminin (RABBIT) (600-401-116-0.5)	500 µg

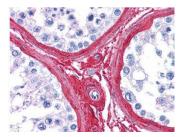


Figure 5. IHC using Anti-Collagen Type III (600-401-105-0.5) in formalin-fixed paraffin-embedded human tissue.

### STEM CELL ANTIBODIES

While stem cell research remains a growing area of scientific exploration with numerous possibilities in various fields for disease treatments, we offer antibodies against many stem cell biomarkers to isolate or identify differentiated vs. non differentiated cells

Product	Size
Oct-4 (RABBIT) Antibody (600-401-A95)	100 µg
NANOG (RABBIT) Antibody (600-401-H03)	100 µg
GATA4 (MOUSE) [10D8.B10.D4 IgG1 kappa] Antibody (200-301-P15)	100 µg
PPAR alpha (N-terminal) (RABBIT) Antibody (600-401-421)	100 µg
Nestin (RABBIT) Antibody (600-401-417)	100 µg
SOX2 (RABBIT) Antibody (600-401-ES5)	100 µg

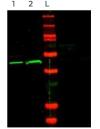


Figure 6. WB using Anti-OCT4 (600-401-A95) in mouse embryonic fibroblast (MEF) cell lysate (lane 1) and HeLa nuclear extract (HN) (lane 2).

**Can't find what you're looking for?** The above lists highlight some of our best selling products; however, we have over 800 cell biology antibodies to choose from, including antibodies to targets extensively modified by post-translational modifications. If you're in need of something specific, our custom services team can develop and characterize antibodies to your unique specifications. Visit our website or contact our technical support team for more information.

= Trial size available