

# goat anti-rat IgG-AP: sc-2021

## BACKGROUND

Santa Cruz Biotechnology's secondary antibodies are available conjugated to either an enzyme, biotin or fluorophore for use in a variety of antibody-based applications including Western Blot, immunostaining, flow cytometry and ELISA. Secondary antibodies are commonly affinity purified against immobilized whole IgG isotypes, including IgG<sub>1</sub>, IgG<sub>2a</sub>, IgG<sub>2b</sub>, IgG<sub>3</sub> and IgG<sub>4</sub>. Santa Cruz Biotechnology offers a wide selection of secondary antibodies, which are used in conjunction with our Cruz Marker™ molecular weight standards. We also provide specialized secondaries, such as pre-adsorbed secondary antibodies, which are pre-adsorbed with human IgG and mouse IgG for immunoglobulin-rich tissues and cells, F(ab')<sub>2</sub> fragment secondary antibodies that reduce non-specific secondary antibody binding to Fc receptors on the cell surface, and isotype-specific secondary antibodies against IgM, IgA and IgY.

## SOURCE

goat anti-rat IgG-AP is an affinity purified secondary antibody raised in goat against rat IgG and conjugated to AP (alkaline phosphatase).

## PRODUCT

Each vial contains 200 µg IgG in 0.5 ml of PBS containing 50% glycerol, 1 mM zinc chloride, 0.02% sodium azide and 1 mM magnesium chloride.

## APPLICATIONS

goat anti-rat IgG-AP is recommended for detection of rat IgG by Western Blotting (starting dilution: 1:5000, dilution range 1:5000-1:10000; optimal dilution to be determined by titration).

## RECOMMENDED SUPPORT PRODUCTS

- Western Blotting Luminol Reagent, for 2,000 cm<sup>2</sup> membrane area: sc-2048
- RIPA Lysis Buffer, 50 ml, cell lysis buffer with protease inhibitors: sc-24948
- Electrophoresis Sample Buffer, 2X, 25 ml, reducing buffer: sc-24945
- Complete™ Protease Inhibitor Cocktail Tablet, 20 tablets: sc-29130
- Running Buffer, 10X, 1 L, TRIS-Glycine WB running buffer, pH 8.3: sc-24949
- Towbin, with SDS, 10X, 1 L, WB transfer buffer pH 8.3: sc-24954
- Bovine Serum Albumin (BSA), 100 g, blocking/incubation agent: sc-2323
- TBS Blotto A, lyophilized powder in single-use bottle: sc-2333
- UltraCruz™ PVDF Transfer Membrane, 0.45 µm, 30 cm x 3 m roll: sc-3723
- UltraCruz™ Nitrocellulose Pure Transfer Membrane, 0.22 µm, 30 cm x 3 m roll: sc-3718
- UltraCruz™ Tissue Culture Dish, 100 mm polystyrene dish: sc-200286
- UltraCruz™ Cell Scrapers, 25 cm, sterile, 100 per case: sc-213229
- UltraCruz™ Electrophoresis Cell: sc-201625: runs up to 10 or 15 sample by SDS – PAGE protein electrophoresis
- UltraCruz™ Autoradiography Film, Blue, 8 x 1, 100 sheets: sc-201697
- UltraCruz™ Gel Incubation Trays, 100 per pack: sc-201755 (blue), sc-201756 (green), sc-201757 (pink), sc-201758 (yellow), sc-201759 (orange)

## SELECT PRODUCT CITATIONS

1. Li, X.K., et al. 2001. Fulminant hepatitis by Fas-ligand expression in MRL-lpr/lpr mice grafted with Fas-positive livers and wild-type mice with Fas-mutant livers. *Transplantation* 71: 503-508.
2. Baharav, E., et al. 2004. *Lactobacillus GG* bacteria ameliorate arthritis in Lewis rats. *J. Nutr.* 134: 1964-1969.
3. Rapaka, R.R. and Goetzman, E.S. 2007. Enhanced defense against *Pneumocystis carinii* mediated by a novel Dectin-1 receptor Fc fusion protein. *J. Immunol.* 178: 3702-3712.
4. Pinheiro, P.S., et al. 2007. GluR7 is an essential subunit of presynaptic kainate autoreceptors at hippocampal mossy fiber synapses. *Proc. Natl. Acad. Sci. USA* 104: 12181-12186.
5. Cao, C., et al. 2009. Gα<sub>11</sub> and Gα<sub>13</sub> are required for epidermal growth factor-mediated activation of the Akt-mTORC1 pathway. *Sci. Signal.* 2: ra17.
6. Dmitrieff, E.F., et al. 2011. Chronic hyperoxia alters the expression of neurotrophic factors in the carotid body of neonatal rats. *Respir. Physiol. Neurobiol.* 175: 220-227.
7. Zhang, H.J., et al. 2012. ATPA induced GluR5-containing kainate receptor S-nitrosylation via activation of GluR5-Gq-PLC-IP(3)R pathway and signalling module GluR5-PSD-95-nNOS. *Int. J. Biochem. Cell Biol.* 44: 2261-2271.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\* Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.