

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat STAT3 from whole cell extracts.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse STAT3 Arg688-Met770 Accession # U06922
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

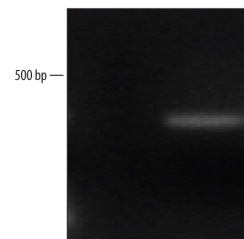
Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Chromatin Immunoprecipitation (ChIP)	5 µg/5 x 10 ⁶ cells	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Immunoprecipitation	2 µg/500 µg cell lysate	See Below

DATA

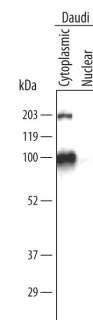
Chromatin Immunoprecipitation (ChIP)

Jurkat		
-	+	Anti-STAT3
+	-	Goat IgG



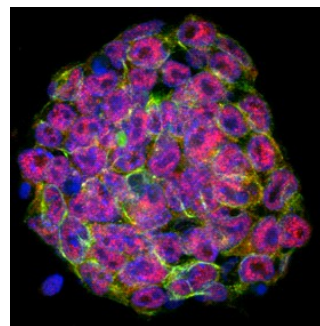
Detection of STAT3-regulated Genes by Chromatin Immunoprecipitation. Jurkat human acute T cell leukemia cell line treated with 1000 U/mL Recombinant Human IFN- α Universal Type I (Catalog # 11200-1) for 1 hour was fixed using formaldehyde, resuspended in lysis buffer, and sonicated to shear chromatin. STAT3/DNA complexes were immunoprecipitated using 5 µg Goat Anti-Human/Mouse/Rat STAT3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1799) or control antibody (Catalog # AB-108-C) for 15 minutes in an ultrasonic bath, followed by Biotinylated Anti-Goat IgG Secondary Antibody (Catalog # BAF109). Immunocomplexes were captured using 50 µL of MagCollect Streptavidin Ferrofluid (Catalog # MAG999) and DNA was purified using chelating resin solution. The *c-myc* promoter was detected by standard PCR.

Immunoprecipitation



Immunoprecipitation of Human STAT3. STAT3 was immunoprecipitated from 500 µg of Daudi human Burkitt's lymphoma cell line cytoplasmic and nuclear lysates following incubation with 2 µg Goat Anti-Human/Mouse/Rat STAT3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1799) for overnight at 4 °C. STAT3-antibody complexes were absorbed using Protein G agarose (Invitrogen). Immunoprecipitated STAT3 was detected by Western blot using 0.1 µg/mL Human STAT3 Monoclonal Antibody (Catalog # MAB1799). View our [recommended buffer recipes for immunoprecipitation](#).

Immunocytochemistry



STAT3 in D3 Mouse Cell Line. STAT3 was detected in immersion fixed D3 mouse embryonic stem cell line using Goat Anti-Human/Mouse/Rat STAT3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1799) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001). Tubulin was also detected using Tubulin Antibody (Catalog # NB600-506; Novus Biologicals) and stained using the NorthernLights™ 493-conjugated Anti-Rat IgG Secondary Antibody (green; Catalog # NL015). Cells were counterstained with DAPI (blue). Specific staining of STAT3 was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Stem Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 6 months, -20 to -70 °C under sterile conditions after reconstitution.