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Datasheet for 600-401-GH3

STAT3 R31-Me2a Antibody

Overview

Description:	Anti-STAT3 [Asym-dimethyl Arg31] (RABBIT) Antibody - 600-401-GH3
Item No.:	600-401-GH3
Size:	100 µg
Applications:	Dot Blot
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Signal transducer and activator of transcription 3 (Stat3) belongs to a family of cytoplasmic transcription factors that can be activated by phosphorylation by its cell surface receptor. Stat3 plays a key role in many cellular processes such as cell growth and apoptosis. It also mediates cellular responses to interleukins, KITLG/SCF,EGF, IFN-alpha and other growth factors and may mediate cellular responses to activated FGFR1, FGFR2, FGFR3 and FGFR4. Stat3 forms a homodimer or a heterodimer with a related family member (e.g. STAT1). Activation occurs through phosphorylation of tyrosine 705 and serine 727. Phosphorylation of Stat3 at Tyr705 induces Stat3 dimerization and nuclear translocation. Serine phosphorylation is important for stable DNA-binding of Stat3 homodimers and maximal transcriptional activity. Stat3 can have a dual role in cancer, it has been found that Stat3 protein can promote oncogenesis and have a tumor suppressor role depending upon the mutational background of the tumor.
Synonyms:	rabbit anti-STAT3 Asym-dimethyl Arg31 antibody, rabbit anti-STAT3 R31me2a antibody, Signal transducer and activator of transcription 3, Acute-phase response factor, APRF
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	STAT3
Reactivity:	Human

PTM Specificity:	Methylation
Immunogen Type:	Conjugated Peptide
Immunogen:	STAT3 [Asym-dimethyl Arg31] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic monomethylated peptide surrounding Arginine 31 of human STAT.
Purity/Specificity:	Anti-STAT3 R31-Me2a was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody reacts with human STAT3. A BLAST analysis was used to suggest cross-reactivity with Human, mouse, and rat. Cross-reactivity with STAT3 from other sources has not been determined.
Relevant Links:	• UniProtKB - P40763

Application Details

Tested Applications:	Dot Blot
Application Note:	Anti-STAT3 [Asym-dimethyl Arg31] antibody has been tested in Dot Blot and is useful for Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~88 kDa corresponding to STAT3 protein by Western Blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5000
WB:	0.1-0.05 µg/ml
Other:	Dot Blot: 1:1000

Formulation

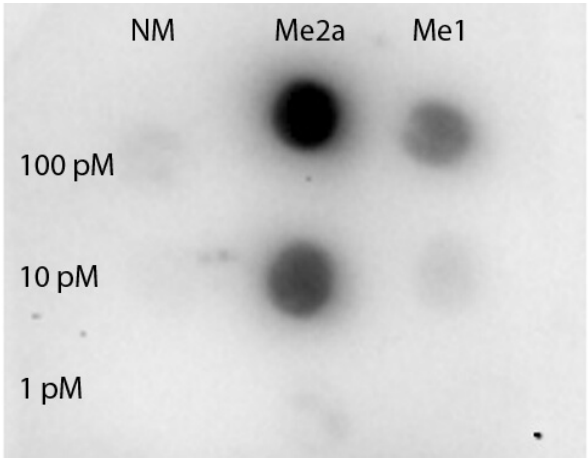
Physical State:	Liquid (sterile filtered)
Concentration:	0.83 mg/ml by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.05% (w/v) Sodium Azide
Stabilizer:	30% Glycerol

Shipping & Handling

Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Dot Blot
Dot Blot of Rabbit anti-STAT3 R31-Me2a antibody. Antigen: non-modified, monomethylated and asymmetric dimethylated forms of the STAT3 R31-Me2a immunizing peptide. Load: 100, 10, 1 picomolar as indicated. Primary antibody: STAT3 R31-Me2a antibody at 1:10000 for 60 min at RT. (Date: 12/22/14; Exposure time: 80 seconds.)

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