

Product datasheet for AP20284PU-N

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OriGene Technologies, Inc.

STAT5B Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IHC, WB

Recommended Dilution: Western blot: 1/500-1/1000.

Immunohistochemistry on paraffin sections: 1/50-1/200.

Reactivity: Human, Mouse, Rat

Host: Rabbit

Clonality: Polyclonal

Specificity: This antibody detects endogenous levels of Stat5b protein.

Formulation: Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.2

State: Aff - Purified

State: Liquid purified Ig fraction

Concentration: 1.0 mg/ml

Purification: Affinity-chromatography using epitope-specific immunogen; purity is > 95% (by SDS-PAGE)

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: ~ 90 kDa

Gene Name: signal transducer and activator of transcription 5B

Database Link: Entrez Gene 20851 MouseEntrez Gene 25126 RatEntrez Gene 6777 Human

P51692



Background:

Stat5a and Stat5b (signal transducer and activator of transcription 5a and 5b; 96% homology) undergo receptor tyrosine kinase or G protein-coupled receptor-dependent phosphorylation in response to cytokines or growth factors, and then form homo- or heterodimers that translocate to the nucleus where they initiate transcription. Activation of Stat5a via IL-2, IL-3, IL-7, GM-CSF, erythropoietin, thrombopoietin and growth hormones influences proliferation, differentiation and apoptosis in lymphohematopoietic cells. Phosphorylation of Stat5a at Ser 127/Ser 128 and Ser 779 are contigent on ErbB4-mediated activation of Stat5a. Activation of Stat5b via IL-2, IL-4, CSF1 and growth hormones influences TCR signaling, apoptosis, adult mammary gland development and sexual dimorphism of liver gene expression. Stat5b is the major liver-expressed Stat5 form that has been shown to fuse with retinoic acid receptor- α gene in acute promyelocytic leukemias (APLL). Stat5a/b null mice have severely impaired lymphoid development and differentiation.

Synonyms: STAT-5B

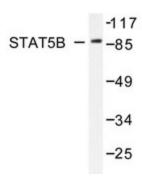
Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Stem cell relevant signaling - JAK/STAT

signaling pathway, Transcription Factors

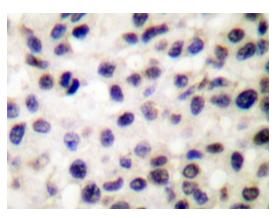
Protein Pathways: Acute myeloid leukemia, Chemokine signaling pathway, Chronic myeloid leukemia, ErbB

signaling pathway, Jak-STAT signaling pathway, Pathways in cancer

Product images:



Western blot analysis of Stat5b antibody (AP20284PU-N) in extracts from HeLa cells.



Immunohistochemistry analyzes of Stat5b antibody (AP20284PU-N) in paraffin-embedded human colon carcinoma tissue.