

EnoGene

## STAT3 Polyclonal Antibody

E91192

**Catalog Number:** E91192**Amount:** 100ul, 100ug/100ul

**Background:** The Stat3 transcription factor is an important signaling molecule for many cytokines and growth factor receptors (1) and is required for murine fetal development (2). Stat3 is constitutively activated in a number of human tumors (3,4) and possesses oncogenic potential (5) and anti-apoptotic activities (3). Stat3 is activated by phosphorylation at Tyr705, which induces dimerization, nuclear translocation, and DNA binding (6,7). Transcriptional activation seems to be regulated by phosphorylation at Ser727 through the MAPK or mTOR pathways (8,9). Stat3 isoform expression appears to reflect biological function as the relative expression levels of Stat3 $\alpha$  (86 kDa) and Stat3 $\beta$  (79 kDa) depend on cell type, ligand exposure, or cell maturation stage (10). It is notable that Stat3 $\beta$  lacks the serine phosphorylation site within the carboxy-terminal transcriptional activation domain (8).

**Calculated MW:** 88kDa

**Form of Antibody:** Rabbit IgG in PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

**Storage/Stability:** Store at -20°C or -80°C. Avoid freeze / thaw cycles.

**Immunogen:** Recombinant protein of human STAT3

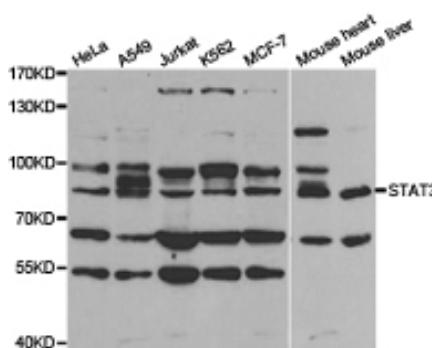
**Synonyms:** STAT3;APRF;FLJ20882;HIES;MGC16063 ;

**Reactivity:** Human, Mouse, Rat

**Applications:** WB IHC

**References:**

1. Heim, M.H. (2001) J Recept Signal Transduct Res 19, 75-120.
2. Takeda, K. et al. (1997) Proc Natl Acad Sci U S A 94, 3801-4.
3. Catlett-Falcone, R. et al. (1999) Immunity 10, 105-15.
4. Garcia, R. and Jove, R. (1998) J Biomed Sci 5, 79-85.
5. Bromberg, J.F. et al. (1999) Cell 98, 295-303.
6. Darnell, J.E. et al. (1994) Science 264, 1415-21.
7. Ihle, J.N. (1995) Nature 377, 591-4.
8. Wen, Z. et al. (1995) Cell 82, 241-50.
9. Yokogami, K. et al. (2000) Curr Biol 10, 47-50.
10. Biethahn, S. et al. (1999) Exp Hematol 27, 885-94.



Western blot analysis of extracts of various cell lines, using STAT3 antibody.

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