

Basic Information

Product Name	Anti-STAT3 Antibody	
Gene Name	STAT3	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, monkey, mouse, rat	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS , 0.02% NaN ₃ , 1 mg BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human STAT3 (139-167aa EKQQMLEQHLQDVRKRVQDLEQMKVVEN), identical to the related mouse and rat sequences.	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	79KD86KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

The transcription factor, signal transducer and activator of transcription-3 (STAT-3) is the most pleiotropic member of the signal transducer and activator of transcription (STAT) family of transcription factors and mediates pivotal responses for the cytokine family. The mouse STAT3 gene contains 24 exons and spans 30 kb. The translation initiation codon is in exon 2, and the stop codon is in exon 24. STAT3 is mapped to 17q21. It contributes to various physiological processes. Hepatic STAT-3 signaling is thus essential for normal glucose homeostasis and may provide new therapeutic targets for diabetes mellitus.

Selected Validation Data

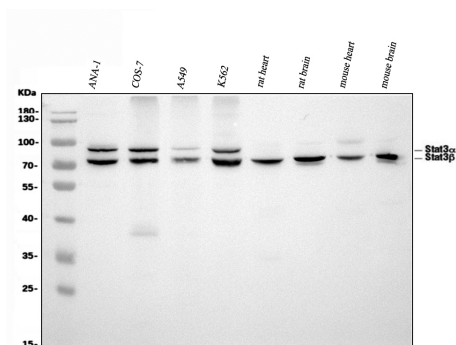


Figure 1. Western blot analysis of anti- STAT3 antibody (PB0540). The sample well of each lane was loaded with 50ug of sample under reducing conditions.
 Lane 1: ANA-1 whole cell lysates,
 Lane 2: COS-7 whole cell lysates,
 Lane 3: A549 whole cell lysates,
 Lane 4: K562 whole cell lysates,
 Lane 5: rat heart tissue lysates,
 Lane 6: rat brain tissue lysates,
 Lane 7: mouse heart tissue lysates,
 Lane 8: mouse brain tissue lysates.

Use rabbit anti- STAT3 1:1000, probed with a goat anti-rabbit IgG- HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for STAT3 at approximately 79KD 86KD , The expected band size for STAT3 is at 89KD.

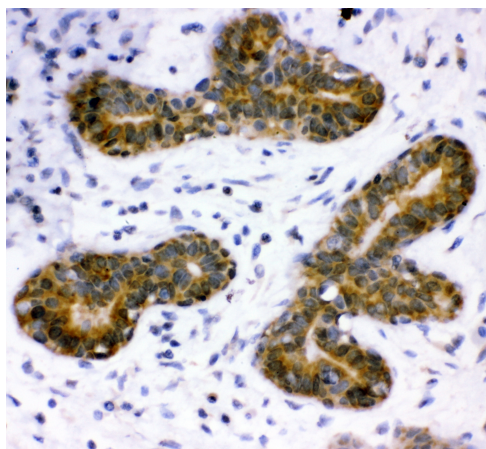


Figure 2. IHC analysis using anti- STAT3 antibody (PB0540). detected in paraffin-embedded section of Human breast cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.