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## STAT3 Recombinant Monoclonal Antibody

Product Code	CSB-RA022812MA1HU	
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.	
Uniprot No.	P40763	
Immunogen	Recombinant Human STAT3 protein	
Species Reactivity	Human	
Tested Applications	ELISA	
Form	Liquid	
Conjugate	Non-conjugated	
Storage Buffer	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4	
Purification Method	Affinity-chromatography	
Isotype	hlgG1	
Clonality	Monoclonal	
Product Type	Recombinant Antibody	
Immunogen Species	Homo sapiens (Human)	
Research Area	Epigenetics and Nuclear Signaling;Cancer?Cardiovascular;Developmental biology;Signal transduction?Stem cells	
Gene Names	STAT3	
Clone No.	28H4	
Image	$\begin{bmatrix} 5\\4\\-\\0\\2\\-\\0\\-2\\0\\-2\\0\\-2\\0\\2\\-\\0\\-2\\0\\2\\4\\-\\6\\-\\0\\-\\0\\-\\0\\-\\0\\-\\0\\-\\0\\-\\0\\-\\0\\-\\0$	The Binding Activity of Human STAT3 with Anti- STAT3 Recombinant Antibody Activity: Measured by its binding ability in a functional ELISA. Immobilized Human STAT3 (CSB-BP022812HU(A4)j7) at 2 $\mu$ g/mL can bind Anti-STAT3 recombinant antibody , the EC <sub>50</sub> is 41.31-75.59 ng/mL.

## Description

The STAT3 recombinant monoclonal antibody was produced by first incorporating STAT3 antibody genes into plasmid vectors. These constructed plasmid vectors were then introduced into appropriate host cells to enable antibody expression using exogenous protein expression technology. Following this, the STAT3 recombinant monoclonal antibody underwent purification via affinity chromatography and was subsequently verified for its suitability in ELISA assays. In a functional ELISA test, it was determined that this STAT3 recombinant monoclonal antibody could efficiently bind to the human STAT3 protein (CSB-BP022812HU(A4)j7) at a concentration of 2 µg/mL, displaying an

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 $EC_{50}$  within the range of 41.31 to 75.59 ng/mL.

STAT3 is a multifunctional protein that plays a central role in cellular signaling, immune responses, inflammation, and various physiological and pathological processes. Its regulation of gene expression makes it a key player in coordinating cellular responses to extracellular signals and maintaining tissue homeostasis. Dysregulation of STAT3 signaling can have profound implications for health and disease.