



Mouse anti-Human ISGF3 γ monoclonal antibody, clone 7/JTHG4 γ (CABT-B9222)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Immunogen	Human ISGF3 γ (p48) aa.126-351
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human
Clone	7/JTHG4 γ
Purification	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Conjugate	Unconjugated
Applications	WB; IF; IHC
Format	Liquid
Concentration	250 μ g/ml
Size	50 μ g
Buffer	Aqueous buffered solution containing BSA, glycerol, and $\leq 0.09\%$ sodium azide.
Storage	Store undiluted at -20°C .

BACKGROUND

Introduction ISGF3 γ is a nuclear DNA-binding protein. ISGF3 (Interferon Stimulated Gene Factor-3) is the

primary transcription activator induced by the binding of interferon α (IFN α) to cell surface receptors. The functional ISGF3 is a complex of four polypeptides of 113 kDa (Stat2), 91 kDa (Stat1 α), 84 kDa (Stat1 β), and 48 kDa. The first three polypeptides (also known as ISGF3 γ) each contain SH2 and SH3 domains. In response to either IFN α , IFN γ , EGF, PDGF, or CSF-1 binding their respective receptors, the cytoplasmic ISGF3 α subunits are tyrosine-phosphorylated and translocated to the nucleus where they form an active complex with the 48 kDa protein (ISGF3 γ). This complex is responsible for modulating the transcription of interferon-stimulated genes (ISGs). Activated ISGF3 α stabilizes ISGF3 γ -DNA interactions. This results in a ternary protein-DNA complex with a 25-fold greater stability than ISGF3 γ -DNA. Thus, growth factors and cytokines activate a common signal transduction pathway that leads to the phosphorylation and nuclear translocation of a group of latent cytoplasmic transcription factors.

Keywords

IRF9; interferon regulatory factor 9; p48; IRF-9; ISGF3; ISGF3G; ISGF-3 gamma; ISGF3 p48 subunit; interferon-stimulated gene factor 3 gamma; transcriptional regulator ISGF3 subunit gamma
