

**Rabbit Anti-STAT1/ISGF3 [EPR21057-141]: RM0199**

**Intended Use:** For Research Use Only

**Description:** Membrane STAT1 (signal transducer and activator of transcription 1) or ISGF3 is involved in upregulating genes due to a signal by either type I, type II, or type III interferons. STAT1 may be a target for therapeutic treatment to restore apoptotic mechanisms and sensitivity to chemotherapy. The phosphorylated STATs dimerize, associate with ISGF3G/IRF-9 to form a complex termed ISGF3 transcription factor, that enters the nucleus. ISGF3 binds to the IFN stimulated response element (ISRE) to activate the transcription of interferon stimulated genes, which drive the cell in an antiviral state. The phosphorylated STAT1 is a potential predictor of interferon (IFN) response for advanced renal cell carcinoma. Mutations in the gene is associated with death at an early age due to overwhelming viral infection (complete STAT1 deficiency).

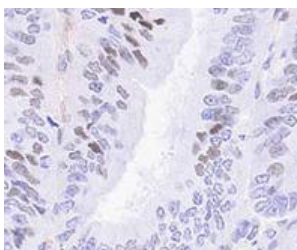
**Specifications**

Clone: EPR21057-141  
 Source: Rabbit  
 Isotype: IgG  
 Reactivity: Human  
 Localization: Cytoplasm, nucleus  
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, Flow Cyt., IP, WB  
 Package:

Description	Catalog No.	Size
STAT1/ISGF3 Concentrated	RM0199	1 ml

**IHC Procedure**

Positive Control Tissue: Tonsil and kidney, paired human endometrial cancer and non-tumor endometrium tissue  
 Concentrated Dilution: 100-500  
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual  
 \* Result should be confirmed by an established diagnostic procedure.



FFPE human paired endometrial cancer stained with anti-STAT1 using DAB

**References:**

1. Lentivirus-mediated overexpression of CD97/ADGRE5 reverses dysregulated high glucose-induced endothelial cell migration. Zhao W, et al. Mol Med Rep 15:3048-3054, 2017.
2. PARP9 and PARP14 cross-regulate macrophage activation via STAT1 ADP-ribosylation. Iwata H, et al. Nat Commun 7:12849, 2016.
3. A role for stefin B (cystatin B) in inflammation and endotoxemia. Maher K, et al. J Biol Chem 289:31736-50, 2014.
4. Suppressors of cytokine signaling 2 and 3 diametrically control macrophage polarization. Spence S, et al. Immunity 38:66-78 (2013).