Anti-IL-13 Receptor alpha 1 Antibody [JU38-89]

ET7106-61

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IF-Cell, IHC-P
Molecular Wt:	Predicted band size: 49 kDa
Clone number:	JU38-89

Description: Interleukin 13 receptor, alpha 1, also known as IL13RA1 and CD213A1 (cluster of differentiation 213A1), is a human gene. Binds with low affinity to interleukin-13 (IL13). Together with IL4RA can form a functional receptor for IL13. Also serves as an alternate accessory protein to the common cytokine receptor gamma chain for interleukin-4 (IL4) signaling, but cannot replace the function of IL2RG in allowing enhanced interleukin-2 (IL2) binding activity. This protein has been shown to bind tyrosine kinase TYK2, and thus may mediate the signaling processes that lead to the activation of JAK1, STAT3 and STAT6 induced by IL13 and IL4.

Immunogen: Recombinant protein within Human IL13 Receptor alpha 1 aa 1-127 / 427.

Positive control: HepG2 cell lysate, HeLa cell lysate, HepG2, human liver tissue.

Subcellular location: Membrane.

Database links: SwissProt: P78552 Human

Recommended Dilutions:

WB	1:1,000-1:2,000
IF-Cell	1:100-1:500
IHC-P	1:50-1:200

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

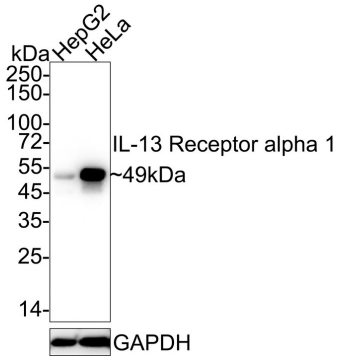

Fig1: Western blot analysis of IL-13 Receptor alpha 1 on different lysates with Rabbit anti-IL-13 Receptor alpha 1 antibody (ET7106-61) at 1/1,000 dilution.

Lane 1: HepG2 cell lysate
Lane 2: HeLa cell lysate

Lysates/proteins at 40 µg/Lane.

Predicted band size: 49 kDa
Observed band size: 49 kDa

Exposure time: 10 second; ECL: K1802;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET7106-61) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

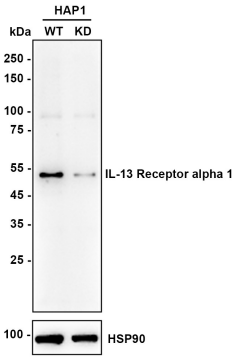

Fig2: Western blot analysis of IL-13 Receptor alpha 1 on different lysates with Rabbit anti-IL-13 Receptor alpha 1 antibody (ET7106-61) at 1/2,000 dilution.

Lane 1: HAP1-parental cell lysate
Lane 2: HAP1-IL-13 Receptor alpha 1 KD cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 49 kDa
Observed band size: 49 kDa

Exposure time: 60 seconds; ECL: K1802;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET7106-61) at 1/2,000 dilution was used in K1803 at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Fig3: ICC staining of IL-13 Receptor alpha 1 in HepG2 cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with

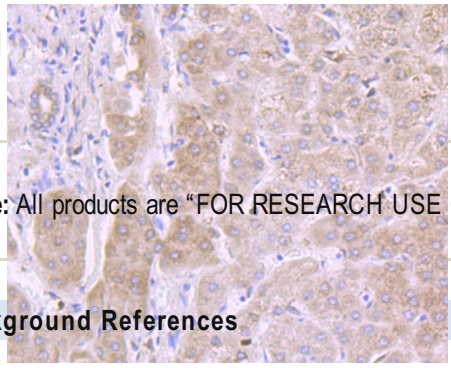

Fig4: Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-IL-13 Receptor alpha 1 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET7106-61, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Background References

1. Aguirre CA. et. al. Two single nucleotide polymorphisms in IL13 and IL13RA1 from individuals with idiopathic Parkinson's disease increase cellular susceptibility to oxidative stress. Brain Behav Immun. 2020 Aug