For Research Use Only

# XBP1S-specific Recombinant antibody

Catalog Number:83959-5-RR



**Basic Information** 

Catalog Number: GenBank Accession Number:

83959-5-RR BC000938 GeneID (NCBI):

100ul , Concentration: 1000  $\mu g/ml$  by 7494 Nanodrop: **UNIPROT ID:** P17861 Rabbit Full Name:

Isotype: X-box binding protein 1

IgG Calculated MW: Immunogen Catalog Number: 261 aa, 29 kDa AG21703 Observed MW: 60 kDa

241004B6 Recommended Dilutions: WB 1:5000-1:50000

IHC 1:250-1:1000

**Purification Method:** 

Protein A purfication

CloneNo.:

**Applications** 

**Tested Applications:** 

WB, IHC, FC (Intra), ELISA

Species Specificity:

human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

#### **Positive Controls:**

WB: HeLa cells, HuH-7 cells, Raji cells, HEK-293T cells, MCF-7 cells, mouse liver tissue, rat liver tissue

IHC: mouse liver tissue,

#### **Background Information**

XBP1, also named as XBP2, belongs to the bZIP family. The X-box-binding protein-1 (XBP1) is a transcriptional regulator of the ER stress response that lies downstream of inositol-requiring enzyme 1 (IRE1a) activation (PMID: 14559994). XBP1 localizes in the nucleus. As a transcription factor, it is essential for hepatocyte growth, the differentiation of plasma cells, the immunoglobulin secretion, and the unfolded protein response. XBP1 has an association with major affective disorder. The unspliced XBP1U isoform is composed of 261 amino acid residues, and the spliced XBP1S isoform is composed of 376 amino acid residues. The calculated molecular weight of protein generated from the unspliced XBP1 isoform XBP1U mRNA is 33 kDa, and protein generated from spliced XBP1 isoform XBP1S mRNA is 54 kDa. This antibody specially recognizes the XBP1S isoform.

## Storage

Storage:

Store at -20°C. Stable for one year after shipment.

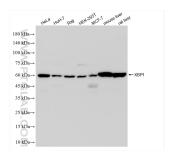
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

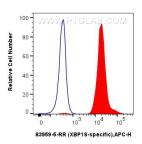
### **Selected Validation Data**



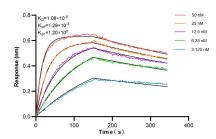
Various lysates were subjected to SDS PAGE followed by western blot with 83959-5-RR (XBP1S-specific antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded mouse liver tissue slide using 83959-5-RR (XBP15-specific antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10^6 Ramos cells were intracellularly stained with 0.25 ug XBP1S-specific Recombinant antibody (83959-5-RR, Clone:241004B6) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.



Biolayer interferometry (BLL) kinetic assays of 83959-5-RR against Human XBP1S-specific were performed. The affinity constant is 1.08 nM.