

## Basic Information

<b>Product Name</b>	Anti-Connexin-32/GJB1 Antibody	
<b>Gene Name</b>	GJB1	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human	
<b>Tested Application</b>	WB, FCM, ELISA	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human Connexin-32/GJB1 recombinant protein (Position: A92-A147).	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	32 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## Background Information

Gap junction beta-1 protein (GJB1), also known as connexin 32 (Cx32) is a transmembrane protein that in humans is encoded by the GJB1 gene. This gene encodes a member of the gap junction protein family. The gap junction proteins are membrane-spanning proteins that assemble to form gap junction channels that facilitate the transfer of ions and small molecules between cells. According to sequence similarities at the nucleotide and amino acid levels, the gap junction proteins are divided into two categories, alpha and beta. Mutations in this gene cause X-linked Charcot-Marie-Tooth disease, an inherited peripheral neuropathy. Alternatively spliced transcript variants encoding the same protein have been found for this gene.

## Selected Validation Data

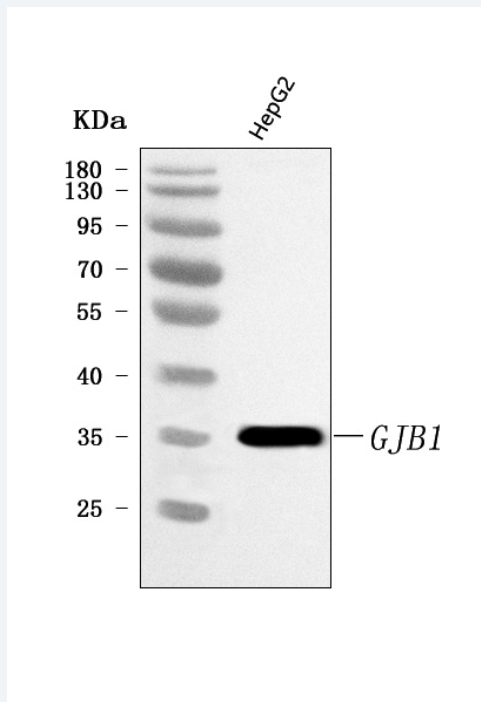


Figure 1. Western blot analysis of anti-Connexin-32/GJB1 antibody (A01050-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HepG2 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Connexin-32/GJB1 antigen affinity purified polyclonal antibody (A01050-1) and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Connexin-32/GJB1 at approximately 35 kDa. The expected band size for Connexin-32/GJB1 is at 32 kDa.

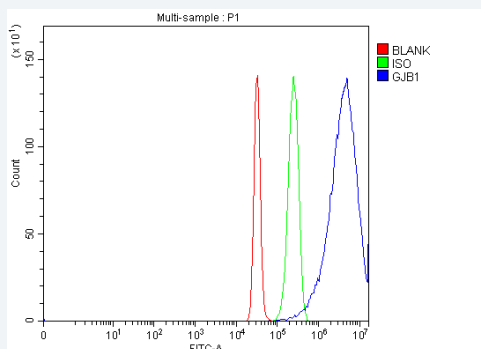


Figure 2. Flow Cytometry analysis of HepG2 cells using anti-Connexin-32/GJB1 antibody (A01050-1).

Overlay histogram showing HepG2 cells stained with A01050-1 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-Connexin-32/GJB1 Antibody (A01050-1, 1:100). DyLight<sup>®</sup>488 conjugated goat anti-rabbit IgG (BA1127, 1:100) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG (Catalog # BA1045) (1:100) used under the same conditions. Unlabelled sample (Red line) was also used as a control.