CELL APPLICATIONS, INC.

GFP Antibody

Cat. No. CP10114

Applications:	**WB, IP, IHC, ICC, FACS**
Detected MW:	**27 kDa**
Species & Reactivity:	**Human**
Isotype:	**Rabbit IgG**

BACKGROUND

The ability to visualize organelle localization and dynamics is very useful in studying cellular physiological events. Until recently, this has been accomplished using a variety of staining methods. However, staining can give inaccurate information due to nonspecific staining, diffusion of the stain or through toxic effects. The ability to target green fluorescent protein (GFP) to various organelles allows for specific labeling of organelles *in vivo*. GFP is a jellyfish *Aequorea victoria* protein composed of 238 amino acid residues (26.9kDa).[1] It exhibits bright green fluorescence when exposed to blue light. When introduced into eukaryotic cells, GFP gene produces a fluorescent protein without the need for exogenous substrates or cofactors. GFP fluorescence is stable under fixation conditions and suitable for a variety of applications. The GFP-tagged genes now provide a powerful and more direct visual demonstration of the localization of the fusion protein.[2] GFP can also be used for other studies including protein-protein interaction by fluorescence energy transfer (FRET) assay.

References:
1. Zimmer, M.: Chem. Rev. 102:759-82, 2002
2. Pollok, B.A. & Heim, R.: Trend in Cell Biol. 9:57-60, 1999

TECHNICAL INFORMATION

Source:
GFP Antibody is a mouse monoclonal antibody raised against purified recombinant GFP protein expressed in *E. coli*.

Specificity and Sensitivity:
This antibody detects GFP proteins without cross-reactivity with other fluorescent proteins.

Storage Buffer: PBS and 30% glycerol

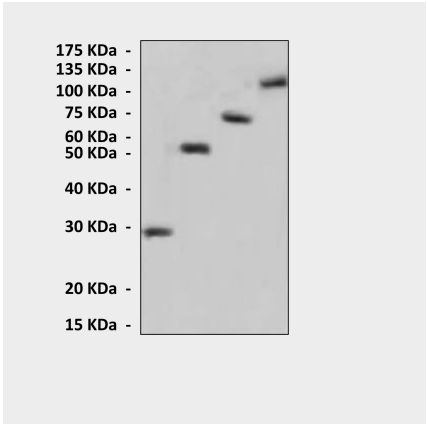
Storage:
Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

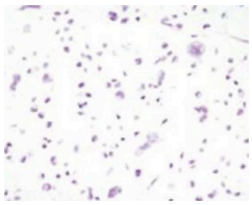
APPLICATIONS

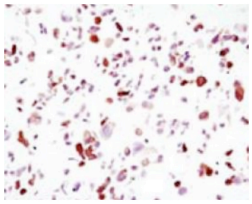
Application:	*Dilution:
WB	1:1000
IP	1:50
IHC	1:50
ICC	1:200
FACS	1:200

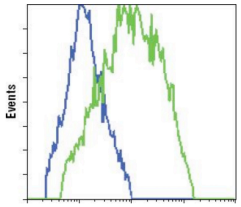
**Optimal dilutions must be determined by end user.*

QUALITY CONTROL DATA









Top: Western Blot detection of various GFP-tagged proteins in transfected 293 cell lysates using GFP Antibody. **Middle, upper:** This antibody stains HCC827 cell lysates transfected with GFP-expression vector or mock vector. **Middle, lower:** This antibody stains HCC827 cell lysates transfected with mock vector in ICC testing. **Bottom:** This antibody specifically reacts with GFP proteins in GFP expression vector-transfected HCC827 cells (Green) vs. mock-transfected HCC827 cells (Blue) in FACS analysis.