

**#2956** Store at -20°C

# GFP (D5.1) XP<sup>®</sup> Rabbit mAb



100 µl  
 (10 western blots)

**Orders** ■ 877-616-CELL (2355)  
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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

| Applications                   | Species Cross-Reactivity* | Molecular Wt. | Isotype      |
|--------------------------------|---------------------------|---------------|--------------|
| W, IHC-P, IF-IC, F Transfected | All                       | 27 kDa        | Rabbit IgG** |

**Background:** Epitope tags are useful for the labeling and detection of proteins using immunoblotting, immunoprecipitation and immunostaining techniques. Due to their small size, they are unlikely to affect the tagged protein's biochemical properties.

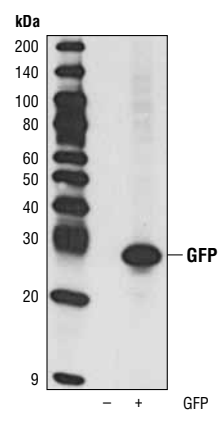
The green-fluorescent protein (GFP) functions as a bioluminescence energy transfer acceptor in the jellyfish *Aequorea* that maximally absorbs light at 395 nm and has an emission spectrum that peaks at 509 nm. GFP has become a very useful tool as a fusion protein that reports gene expression, traces cell lineage and defines subcellular protein localization (1).

**Specificity/Sensitivity:** GFP (D5.1) XP<sup>®</sup> Rabbit mAb detects GFP-tagged proteins exogenously expressed in cells.

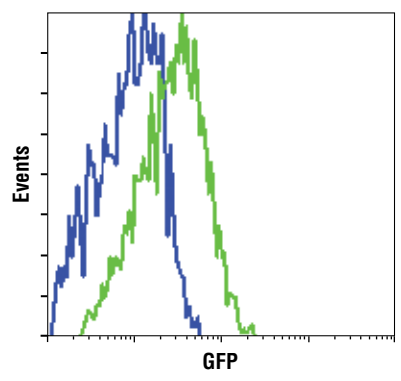
**Source/Purification:** Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the amino terminus of GFP.

**Background References:**

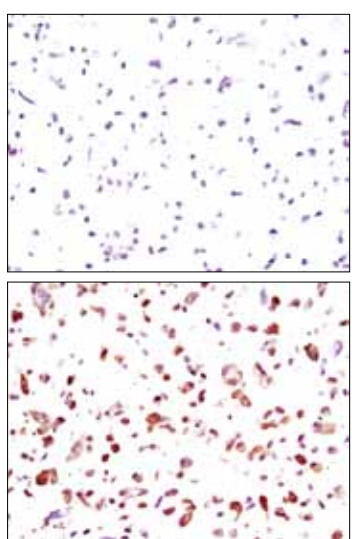
- (1) Miyawaki, A. et al. (2003) *Curr Opin Chem Biol* 7, 557–62.



Western blot analysis of extracts from HCC827 cells, control or GFP-transfected, using GFP (D5.1) XP<sup>®</sup> Rabbit mAb.



Flow cytometric analysis of HCC827 cells, untransfected (blue) or GFP-transfected (green), using GFP (D5.1) XP<sup>®</sup> Rabbit mAb.



Immunohistochemical analysis of paraffin-embedded HCC827 cells untreated (upper) or GFP-transfected (lower) using GFP (D5.1) XP<sup>®</sup> Rabbit mAb.

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

**\*Species cross-reactivity is determined by western blot.**  
**\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.**

**Recommended Antibody Dilutions:**

|                                                                                                |                                                    |
|------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Western blotting                                                                               | 1:1000                                             |
| Immunohistochemistry (Paraffin)                                                                | 1:200†                                             |
| Unmasking buffer:                                                                              | Citrate                                            |
| Antibody diluent:                                                                              | SignalStain <sup>®</sup> Antibody Diluent #8112    |
| Detection reagent:                                                                             | SignalStain <sup>®</sup> Boost (HRP, Rabbit) #8114 |
| † Optimal IHC dilutions determined using SignalStain <sup>®</sup> Boost IHC Detection Reagent. |                                                    |
| Immunofluorescence (IF-IC)                                                                     | 1:75                                               |
| Flow Cytometry                                                                                 | 1:100                                              |

For application specific protocols please see the web page for this product at [www.cellsignaling.com](http://www.cellsignaling.com).

Please visit [www.cellsignaling.com](http://www.cellsignaling.com) for a complete listing of recommended companion products.

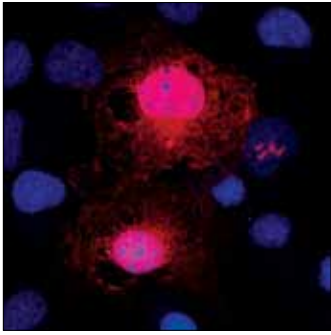
**IMPORTANT:** For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

DRAQ5<sup>®</sup> is a registered trademark of Biostatus Limited.

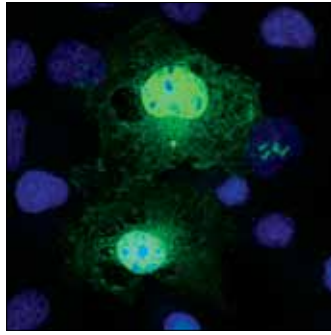
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**Applications Key:** W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide  
**Species Cross-Reactivity Key:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine  
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.

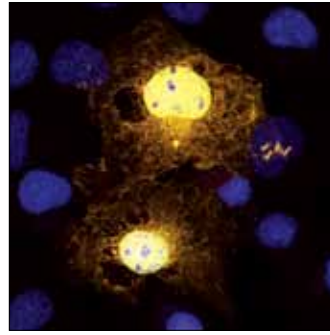
2956



GFP



Merge



*Confocal immunofluorescent analysis of COS-7 cells expressing a GFP-tagged fusion protein (green) using GFP (D5.1) XP<sup>®</sup> Rabbit mAb (red). Blue pseudocolor = DRAQ5<sup>®</sup> #4084 (fluorescent DNA dye).*