



DB064: GFP (C19)

Background:

Green fluorescent protein was originally cloned from the cnidarian, *Aequorea victoria*. This exceptional protein absorbs blue light (maximally at 395 nm) and emits green light (peak at 509 nm) without the requirement of exogenous substrates and cofactors (1). These unique qualities allow GFP to be used to monitor gene expression and protein localization *in vivo*. Several mutant forms of GFP have been developed which fluoresce more intensely and have shifted excitation maxima when compared to the wild type GFP, making them useful for FACS, fluorescence microscopy, and double-labeling applications (2,3).

Origin:

GFP (C19) is provided as an affinity purified rabbit polyclonal antibody, raised against a peptide mapping near the carboxy terminus of *Aequorea victoria* GFP.

Product Details:

Each vial contains 200 µg/ml of affinity purified rabbit IgG, GFP (C19) DB064, in 1 ml PBS containing 0.1 % sodium azide and 0.2% gelatin.

Competition Studies:

A blocking peptide is also available, DB064P, for use in competition studies. Each vial contains 100 µg of peptide in 0.5 ml PBS with 0.1% sodium azide and 100 µg BSA.

Specificity:

GFP (C19) DB064 recognizes all variants of recombinant *Aequorea* green-fluorescent protein. DB064 is recommended for use by western blotting and immunoprecipitation. The suggested western blotting starting dilution is at 1:200.

Storage:

Store this product at 4° C, do not freeze. The product is stable for one year from the date of shipment.

References:

1. Chalfie M, Tu Y., Euskirchen G., Ward W.W., Prasher D.C. 1994. Green Fluorescent Protein as a Marker for Gene Expression. *Science* 263: 802-805.
2. Cormack B.P., Valdivia R.H., and Falkow S. 1996. FACS-optimized mutants of the green fluorescent protein (GFP). *Gene* 173: 33-38.
3. Rizzuto R., Brini M., De Giorgi F., Rossi R., Heim R., Tsien R.Y., and Pozzan T. 1996. Double labelling of the subcellular structures with organelle-targeted GFP mutants *in vivo*. *Curr.Biol.* 6:183-188.