



## ***DB088: GFP (FL3)***

### **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) 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:**

Rabbits were immunized with highly purified green-fluorescent protein (GFP) isolated directly from *Aequorea victoria*. Antibodies were affinity purified using the native GFP immobilized on a solid phase.

### **Product Details:**

Each vial contains 100 µg/ml of affinity purified rabbit IgG, GFP *DB088 (FL3)*, in 1 ml PBS containing 0.1 % sodium azide and 0.2% gelatin.

### **Specificity:**

DB088 GFP (FL3) recognizes all variants of recombinant *Aequorea* green-fluorescent protein by ELISA, Western blotting, immunoprecipitation, and immunohistochemistry. Suggested working dilutions: Elisa: 1;10,000-1:100,000, western blotting: 1:1,000-1:5,000.

### **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.