FT-40484A

Aequorin

Use for single cell injections, and calcium/membrane interactions.

Product Description

Name :	**Aequorin**
	Freeze-dried natural
Catalog Number :	FP-40484A 1mg
Purity :	90-95%
Solubility:	deionized pure water
Emission :	465nm

Storage: Store at -70°C Protect from light and moisture

Introduction

Single band on SDS gel Aequorin photoprotein, already in a complex with native Coelenterazine; generates blue light on contact with Calcium in low Magnesium solutions between pH 6.8 - pH 8.2. Perfect for single cell injections, and calcium/membrane interactions.

Directions for use

Storage

Freeze-dried aequorin is completely stable at −35 °C and below. The shelf life at −70 °C is unlimited. The exposure of aequorin to higher temperatures results in a loss of luminescence activity, the extent of which depends on the temperature and the period of time exposed. Thus, it is possible that a part of luminescence activity is lost during shipping if the shipping conditions are unfavorable. We do our best to minimize such a loss during shipping. In general, shipping on Ice-packs at 0 °C or below causes a negligibly small loss in activity during a transit period of 1-2 days. At 15-20 °C, the loss becomes significant. At 30-35 °C, the activity loss may amount to over 50%.

Guidelines for use

At the time of shipment, the contents of the vial had an ability of emitting light that corresponds to 2.0-2.3 × 10^{15} photons when it was dissolved in deionized water and mixed with a solution of calcium acetate (emission maximum 465 nm). The luminescence activity of this aequorin was more than 95% of that of completely pure natural aequorin at the time of shipment. The protein purity is estimated to be 90-95%, although it is difficult to determine accurately because of the inherently heterogeneous nature of the natural aequorin. The vial contains some buffer salts and glucose in addition to 0.5 mg of aequorin. Thus, when 50 µl of deionized pure water is added to the vial and the contents are dissolved, the composition of the resulting solution will be: 1% aequorin, 0.075 M KCl, 3mM HEPES, 3 mM BisTris, 30 mM glucose and 0.05 mM EDTA, pH approx. 7.1.

References

- **Deng L.** *et al*, Crystal Structure of a Ca2+-discharged Photoprotein, The Journal of Biological Chemistry, 279, 33647-33652 (2004) Article
- **Plieth C.**, Calcium: Just Another Regulator in the Machinery of Life?, Ann Bot 96 (1): 1-8 (2005) Article

Technical and scientific information

Related / associated products and documents

See Products Highlights, BioSciences Innovations catalogue and e-search tool.

- Coelenterazine, UP972333
- Coelenterazine H, UPR30783

Ordering information

Catalog size quantities and prices may be found at www.interchim.com/
Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask : FluoProbes® / Interchim; Hotline : +33(0)4 70 03 73 06