

Code; RP601 Size; 1 μg

TAMRA-EGF, pin-point labeled

Pin-point TAMRA-labeled epidermal growth factor (human)

EGF (Accession No. P01133), pin-point labeled with TAMRA, was produced in the *E.coli* cell-free translation system in the presence of TAMRA-C6-*p*-aminophenylalanine (TAMRA-aminophenylalanine) amber suppressor tRNA, which is the one of the *CloverDirect*TM tRNA reagents for site-directed protein labeling¹⁾. Using amber suppression²⁾, TAMRA-aminophenylalanineis site-specifically incorporated at the amber stop codon (UAG) position.

TAMRA-EGF has the N-terminal ProX[®] tag, which is the sequence tag optimized for high productivity and high introducing efficiency of TAMRA-aminophenylalanine, and has the C-terminal hexahistidine tag.

The concentration of Pin-point TAMRA-EGF was measured by TAMRA fluorescence intensity using with TAMRA dye as a standard. TAMRA-EGF was purified by metal chelating-column.

Additional information; The identical labeled protein, TAMRA-EGF, is able to be produced by Pin-point Fluorescence Labeling Kit 543³⁾, using with frame shift suppression (CGGG codon) instead of amber suppression.

- 1) http://www.proteinexpress.co.jp/j/products/reagent/cloverdirect_2.htm
- 2) Science, 244,182-188 (1989)
- 3) http://www.proteinexpress.co.jp/j/products/reagent/pin-point-kit-1.htm

Package; 1 μg

(20μg/ml solution, 0.1 % (v/w) polyoxyethylene (23) lauryl ether in PBS)

Activity; The ED₅₀ is \leq 300 pg/ml, determined by cell proliferation assay using BALB/c3T3

cells.

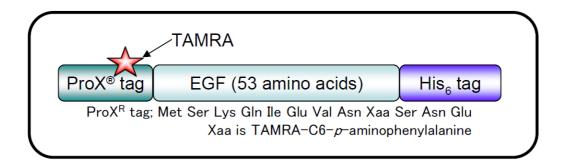
Storage; -80°C

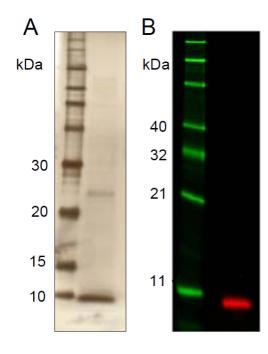
MW: 9.7 kDa

Abs/Em*: 546/575 nm

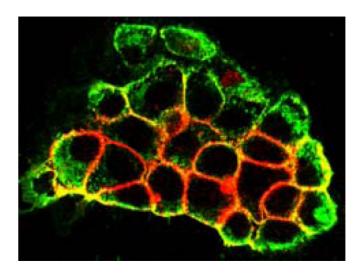
*Approximate absorption (Abs) and fluorescence emission (Em) maxima of TAMRA dye







SDS-PAGE analysis of purified **TAMRA-EGF** A; silver-stain, B; fluorescence image



TAMRA-EGF binds EGF receptor of A431 cells.Merged fluorescence image (Olympus FV1000-D⁴⁾, laser scanning confocal microscope) of TAMRA-EGF (559nm, red) and anti-EGF receptor antibody, FITC-labeled (473nm, green)

4) http://www.olympus.co.jp/jp/lisg/bio-micro/product/fv1000-d/

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Inspiration for Life Science

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