

Code; RP601

Lot;

Size; 1  $\mu$ g



ProteinExpress

# TAMRA-EGF, pin-point labeled

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

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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™ tRNA reagents for site-directed protein labeling<sup>1</sup>). Using amber suppression<sup>2</sup>), TAMRA-aminophenylalanine is 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 543<sup>3</sup>), using with frame shift suppression (CGGG codon) instead of amber suppression.

<sup>1</sup>) [http://www.proteinexpress.co.jp/j/products/reagent/cloverdirect\\_2.htm](http://www.proteinexpress.co.jp/j/products/reagent/cloverdirect_2.htm)

<sup>2</sup>) Science, 244,182-188 (1989)

<sup>3</sup>) [http://www.proteinexpress.co.jp/j/products/reagent/pin-point\\_kit\\_1.htm](http://www.proteinexpress.co.jp/j/products/reagent/pin-point_kit_1.htm)

Package; 1  $\mu$ g  
(20 $\mu$ g/ml solution, 0.1 % (v/w) polyoxyethylene (23) lauryl ether in PBS)

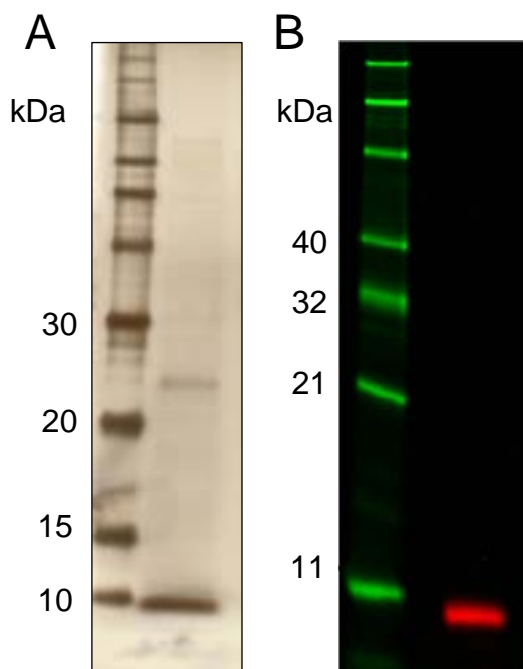
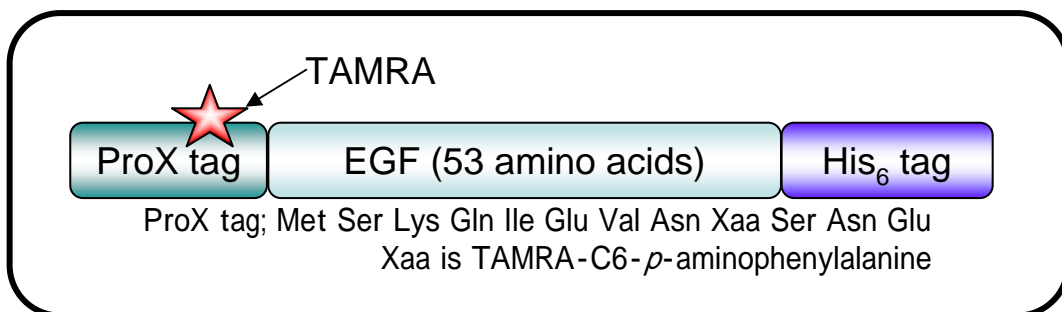
Activity; The ED<sub>50</sub> is 300 pg/ml, determined by cell proliferation assay using BALB/c3T3 cells.

Storage; -80°C

MW; 9.7 kDa

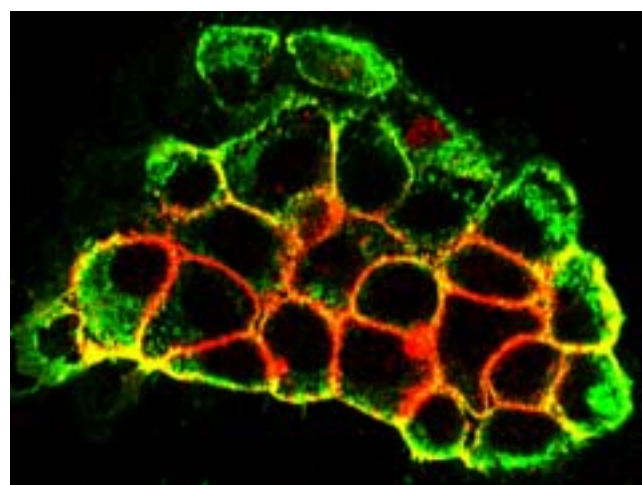
Abs/Em\*; 546/575 nm

\*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-D<sup>4</sup>), laser scanning confocal microscope) of TAMRA-EGF (559nm, red) and anti-EGF receptor antibody, FITC-labeled (473nm, green)

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

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