



## Anti EGF (Rat) Serum Cat. No. YII-Y231-EX Lot No. 30171129

**Description:** This antiserum was raised in a rabbit by immunization with a carrier free recombinant EGF (rat)<sup>1)</sup>. The product vial contains 50  $\mu$ L of the titled antiserum obtained by lyophilizing its 0.001 M phosphate buffer (pH 7.0, 0.5mL) solution . It can be used for immunoassay, immunohistochemistry or any other immunoreaction with EGF (rat).

Immunogen: Recombinant EGF (rat), carrier free Host: Rabbit

## Amino Acid Sequence of EGF (rat)2):

NSNTGCPPSY DGYCLNGGVC MYVESVDRYV CNCVIGYIGE RCQHRDLRWW KLR

Product Form: Lyophilized unpurified serum Size: 50 μL

**Reconstitution:** Reconstitute the product with 0.5mL of 0.01M PBS (pH 7.0) to make a 10 fold diluted stock solution. If it is stored in a refrigerator, add moderate antiseptic to the solution (e.g. NaN3 0.1%).

**Storage:** The product will be stable for over one year if it be stored at -20°C to -80°C until opened. Upon recon- stitution, the antiserum solution must be stored at 2°C to 8°C and used within one month. Repeated freezing- thawing should be avoided.

**Suggested Working Dilution Range:** 1:5,000-20,000 (final dilution ~1:140,000) for radioimmunoassay;

1: 1,000-4,000 for immunohistochemistry (frozen or paraffin sections). Optimal dilution should be determined by each laboratory for each application.

**Specificity** (based on radioimmunoassay)<sup>3,4,5)</sup>: EGF (rat) 100%, EGF (human) 0.1%, EGF (mouse) 1.5%, TGF-α (human) 0%, IGF-1 (human) 0%, insulin (porcine) 0%, glucagon 0%

Positive Control (immunohistochemistry): Rat submaxillary

Species Tested: Rat

## REFERENCES:

- 1) H. Ohgai, N. Yanaihara et al., Production of rat epidermal growth factor by Escherichia coli cells containing a secretion plasmid, Journal of Biotechnology, 10:151-160, 1989
- 2) R.J. Simpson, J. A. Smith et al., Rat epidermal growth factor: complete amino acid sequence. Homology with the corresponding murine and human proteins; isolation of a form truncated at both ends with full in vitro biological activity. European Journal of Biochemistry 153:629-637, 1985
- 3) H. Ohgai, N. Yanaihara et al., Synthesis of rat EGF by gene technology and its use for immunochemical study of EGF in the rat, Peptide Chemistry 1987, T Shiba & S Sakakibara (Ed), Protein Research Foundation, Osaka, P445-448, 1988
- 4) T. koide, N. Yanaihara et al., Development of rat EGF specific RIA and immunoreactive EGF in rat tissues and urine. Proceedings of 11th Gut Hormone Conference, Japan Society of Gut Hormones (Ed), 1989, 9:p625-632
- 5) Y. Hirotani, N. Yanaihara et al., Levels of c-K-ras and hst-1/k-FGF gene products and EGF in regenerating rat liver after partial hepatectomy, Biomedical Research, 16(2):73-81, 1995

## FOR RESEARCH LABORATORY USE ONLY

DO NOT USE ORGANIC SOLVENTS FOR DISSOLVING ANTISERUM

