Description: This antiserum was raised in a rabbit by immunization with a carrier free recombinant EGF (rat)¹⁾. 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 RCOHRDLRWW KLR

Product Form: Lyophilized unpurified serum Size: 50 μ L

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 reconstitution, 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)^{3,4,5)}: 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

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DO NOT USE ORGANIC SOLVENTS FOR DISSOLVING ANTISERUM

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