Description: This antiserum was raised in a rabbit by immunization with a carrier free PTHrP (1-34)-NH₂ peptide. The product vial contains 50 μ L of the titled antiserum, which was obtained by lyophilizing its 0.001M phosphate buffer (pH 7.0, 0.5mL) solution. It can be used for immunoassay, immunohistochemistry or any other immunoreaction with PTHrP.

Immunogen: PTHrP (1-34)-NH₂ (human), carrier free

Host: Rabbit

Amino Acid Sequence of PTHrP (1-34)-NH₂ (human)¹⁾

AVSEHQLLHD KGKSIQDLRR RFFLHHLIAE IHTA-NH2

The amino acid sequences of N-terminal (1-34) of PTHrPs in mammals are 100% conserved.

Product Form: Lyophilized unpurified serum Size: 50 μ L

Reconstitution: R econstitute 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: 1:1,000-3,000 (final dilution ~1:21,000) for radioimmunoassay; 1:500-1,000 for immunohistochemistry (frozen or paraffin sections). Optimal dilution should be determined by each laboratory for each application.

Specificity (based on radioimmunoassay): PTHrP (1-34)NH $_2$ 100%, PTHrP (15-34)NH $_2$ < 0.05%, PTHrP (1-19) 0%, PTHrP (7-34)NH $_2$ 25%

Positive Control (immunohistochemistry): Rat mammary gland (lactation period) or mammary tumor.

Species Tested: Rat, dog, mouse²⁻⁴⁾.

REFERENCES:

- 1) L.J. Suva, G.A. Winslow et al., A parathyroid hormone-related protein implicated in malignant hypercalcemia: cloning and expression. Science 237: 893-898, 1987
- 2) M. Tokunaga, Y. Ueta et al., PTH-related peptide-like immunoreactivity in the median emminence, paracentricular and supraoptic nuclei in colchicine-treated rats. Brain Research 774:216-220, 1997
- 3) A. Konno, A. Sukegawa et al., Immunohistochemistry for parathyroid hormone-related protein (PTHrP) in benign and maglinant mammary mixed tumors of dogs with and without hypercalcemia. Japan Journal of Veterinary Research 47:155-162, 2000
- 4) N. Amizuka, D. Davidson et al., Signalling by fibroblast growth factor receptor 3 and parathyroid hormone-related peptide coordinate cartilage and bone development. Bone 34 (1):13-25, 2004

FOR RESEARCH LABORATORY USE ONLY

DO NOT USE ORGANIC SOLVENTS FOR DISSOLVING ANTISERUM

Yanaihara Institute Inc.

2480-1 Awakura, Fujinomiya, Shizuoka, 418-0011 Japan TEL: +81-544-22-2771 FAX:+81-544-22-2770

For more infomation, please visit our internet website: http://www.yanaihara.co.jp or contact us to: ask@yanaihara.co.jp