

## Anti Total Glucagon Serum

Cat. No. YP040

**Description:** This antiserum was raised in a rabbit by immunization with a bovine serum albumin (BSA) conjugate of synthetic des-Asn<sup>28</sup>, Thr<sup>29</sup>-[Homoser<sup>27</sup>]-glucagon. The product vial contains 50 µL 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 total glucagon (human, rat).

**Immunogen:** Synthetic des-Asn<sup>28</sup>, Thr<sup>29</sup>-[Hser<sup>27</sup>]-glucagon (CNBr-glucagon)-BSA conjugate **Host:** Rabbit

**Amino Acid Sequence of Pancreatic Glucagon<sup>1)</sup>:**  
HSQGTFTSDY SKYLDSRRAQ DFVQWLMNT

**Product Form:** Lyophilized unpurified serum

**Size:** 50 µL

**Reconstitution:** Reconstitute the product with 0.5mL of 0.01M PBS (pH7.0) to make a 10 fold diluted stock solution. If it is stored in a refrigerator, add moderate antiseptic to the solution (e.g. NaN<sub>3</sub> 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:** 1:2,000-10,000 (final dilution ~80,000) for radioimmunoassay; 1:1,000-5,000 for immunohistochemistry (frozen section). Optimal dilution should be determined by each laboratory for each application.

**Specificity** (based on radioimmunoassay)<sup>4)</sup>: Pancreatic glucagon 100%, glicentin (porcine) 100%, glucagon (1-12) < 0.001%, glucagon (13-17) <0.001%, glucagon (19-29) 0%, VIP (porcine) 0%, secretin (porcine) 0%

**Positive Control** (immunohistochemistry): Rat pancreas

**Species Tested:** Human, rat, dog

### REFERENCES:

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- 2) T. Nishio, T Kodaira et al., Production of antisera to des Asn<sup>28</sup> Thr<sup>29</sup> [Homoser<sup>27</sup>-glucagon; The development of radioimmunoassay for total glucagon-like immunoreactivity in human plasma. Endocrinologica japonica 28: 419-427, 1981
- 3) T. Katagiri, H. Shirai et al., Glucagon related substance in dog gastrointestinal muscle layer. Proceedings of the 4th Gut Hormones, Japanese Society of Gut Hormones (Ed) 4: 250-256, 1984
- 4) Winarto A, Miki T, Seino S, Iwanaga T., Morphological changes in pancreatic islets of KATP channel-deficient mice: the involvement of KATP channels in the survival of insulin cells and the maintenance of islet architecture. Arch Histol Cytol. 64(1):59-67. 2001 (Full)
- 5) Onoue S, Ohshima K, Debari K, Koh K, Shioda S, Iwasa S, Kashimoto K, Yajima T., Mishandling of the therapeutic peptide glucagon generates cytotoxic amyloidogenic fibrils. Pharm Res. 21(7):1274-83, 2004

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