

# **Rabbit Anti-Glucose Oxidase antibody**

# SL13387R

| Product Name:          | Glucose Oxidase   |
|------------------------|---|
| Chinese Name:          | 葡萄糖氧化酶抗体  |
| Alias:                 | Beta D Glucose Oxygen 1 Oxido Reductase; Glucose oxidase (Precursor); Glucose Oxyhydrase; GOD; GOX PENAG. |
| Organism Species:      | Rabbit  |
| Clonality:             | Polyclonal  |
| React Species:         | Penicillium amagasakiense   |
| react species.         | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-                                     |
| Applications:          | 500IF=1:100-500 (Paraffin sections need antigen repair)   |
|                        | not yet tested in other applications.   |
|                        | optimal dilutions/concentrations should be determined by the end user.                                    |
| Molecular weight:      | 64kDa   |
| Cellular localization: | Secretory protein   |
| Form:                  | Lyophilized or Liquid   |
| Concentration:         | 1mg/ml  |
| immunogen:             | KLH conjugated synthetic peptide derived from Penicillium amagasakiense Glucose                           |
|                        | Oxidase: 14-120/587   |
| Lsotype:               | IgG   |
| Purification:          | affinity purified by Protein A  |
| Storage Buffer:        | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.  |
| Storage:               | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized                          |
|                        | antibody is stable at room temperature for at least one month and for greater than a year                 |
|                        | when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of                          |
|                        | antibody the antibody is stable for at least two weeks at 2-4 °C.   |
| PubMed:                | <u>PubMed</u>   |
| Product Detail:        | Glucose Oxidase is a dimeric enzyme that binds to $\beta$ -D-glucose and aids in its                      |
|                        | oxidation into D-glucono-1,5-lactone which then hydrolyzes to gluconic acid. Flavin                       |
|                        | adenine dinucleotide (FAD) is a cofactor to Glucose Oxidase that acts as the initial                      |
|                        | electron acceptor and is required for this oxidation to occur. Glucose Oxidase is a                       |
|                        | natural preservative found in honey, where it reduces atmospheric oxygen into                             |

hydrogen peroxide which acts as an antibacterial barrier. Glucose Oxidase is also commonly used in biosensors in which it conveys levels of glucose by keeping track of the number of electrons passed through the enzyme. In this application, Glucose Oxidase is connected to an electrode and the resulting charge is measured.

# Function:

Glucose Oxidase is widely used for the determination of glucose in body fluids and in removing residual glucose or oxygen from foods and beverages. Glucose Oxidase producing moulds such as Aspergillus and Penicillium species are used for the biological production of gluconic acid. CATALYTIC ACTIVITY: Beta D glucose + O2 = D glucono 1,5 lactone + H2O2.

#### Subunit:

Homodimer.

#### **Subcellular Location:**

Secreted.

# Similarity:

Belongs to the GMC oxidoreductase family.

#### Database links:

SwissProt: P81156 PENAG

# **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.