SANTA CRUZ BIOTECHNOLOGY, INC.

Horseradish Peroxidase (2H11): sc-51948

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

BACKGROUND

Peroxidases are widely distributed across microorganisms, plants and animals. In plants, peroxidases are implicated in a variety of secondary metabolic reactions. Horseradish *(Armoracia rusticana)* root is the primary source of commercial peroxidase production. Horseradish Peroxidase (HRP) is a secretory plant peroxidase that catalyzes the oxidation of small aromatic substrates, such as plant hormones and lignin precursors, by hydrogen peroxide. A single chain polypeptide containing four disulfide bridges, Horseradish Peroxidase belongs to a group of peroxidases called ferroprotoporphyrins. It is a non-cytotoxic tracer that is frequently used in Immunohistochemistry to label antigens and their antibodies.

REFERENCES

1. Mason, D.Y., et al. 1982. Preparation of peroxidase: antiperoxidase (PAP) complexes for immunohistological labeling of monoclonal antibodies. J. Histochem. Cytochem. 30: 1114-1122.
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4. Rosenau, C., et al. 2002. Development of a chemiluminescence-based ribonuclease protection assay. Biotechniques 33: 1354-1358.
5. Matsui, T., et al. 2003. Vesicular transport route of Horseradish C1a Peroxidase is regulated by N- and C-terminal propeptides in tobacco cells. Appl. Microbiol. Biotechnol. 62: 517-522.
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7. McInnis, S.M., et al. 2006. The role of stigma peroxidases in flowering plants: insights from further characterization of a stigma-specific peroxidase (SSP) from *Senecio squalidus* (Asteraceae). J. Exp. Bot. 57: 1835-1846.

SOURCE

Horseradish Peroxidase (2H11) is a mouse monoclonal antibody raised against purified Horseradish Peroxidase of *Armoracia rusticana* origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Horseradish Peroxidase (2H11) is recommended for detection of Horseradish Peroxidase of *Armoracia rusticana* origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of Horseradish Peroxidase: 40 kDa.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

SELECT PRODUCT CITATIONS

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3. Jiang, H.M., et al. 2013. Role for granulocyte colony stimulating factor in Angiotensin II-induced neutrophil recruitment and cardiac fibrosis in mice. Am. J. Hypertens. 26: 1224-1233.
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RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.