

## Product Information

### Avidin–Peroxidase

Catalog Number **A3151**  
Storage Temperature  $-20\text{ }^{\circ}\text{C}$

#### Product Description

Avidin is coupled to horseradish peroxidase (HRP) using a modified published procedure.<sup>1</sup> The HRP used for coupling is Catalog Number P8375, Type VI. This HRP contains predominantly the C isozyme (~75%), but includes all others as well, except for the most acidic isozymes.

The details of the conjugate preparation are proprietary, but maleimide activation is involved. The HRP is first activated and then coupled to the avidin. The molecular mass of the conjugate is controlled by the amount of crosslinking reagent used and typically results in conjugates with 1–2 moles peroxidase per mole avidin. HRP has a molecular mass of ~44 kDa and avidin has a molecular mass of ~66 kDa.<sup>2,3</sup> Unconjugated proteins and oversized complexes are removed by gel filtration.

This product can be used as a secondary reagent for detection of biotinylated antibodies in standard ELISA, immunoblotting, and immunocytochemistry procedures.

#### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

#### Preparation Instructions

The product should be reconstituted at a concentration of 1 mg/ml in either PBS or water. Buffered solutions (PBS) are more stable and are preferred for long term storage. The 1 mg/ml Stock Solution can be frozen in aliquots for later usage. If the frozen Stock Solutions start giving high background readings, then prepare new Stock Solutions.

Stock Solutions can be diluted in buffers containing 0.1% BSA as needed.

#### Storage/Stability

Store the product at  $-20\text{ }^{\circ}\text{C}$ .

For long term storage, reconstituted solutions can be frozen in working aliquots. Repeated freeze-thaw cycles should be avoided.

#### Product Profile

Direct ELISA:  $\geq 1:50,000$  dilution of 1 mg/ml Stock Solution.

#### References

1. O'Sullivan, M.J., et al., A Simple Method for the Preparation of Enzyme-antibody Conjugates, *FEBS Letters*, **95(2)**, 311-313 (1978).
2. Welinder, K.G., Amino acid sequence studies of horseradish peroxidase. Amino and carboxyl termini, cyanogen bromide and tryptic fragments, the complete sequence, and some structural characteristics of horseradish peroxidase C. *Eur. J. Biochem.*, **96(3)**, 483-502 (1979).
3. Haeuptle, M.T., et al., Binding sites for lactogenic and somatogenic hormones from rabbit mammary gland and liver. *J. Biol. Chem.*, **258(1)**, 305-314 (1983).

KAA,CKV,MAM 10/10-1

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