HRP-Defender (10x) *(catalog no. 321)*

Concentrated diluent for long-term storage of HRP-conjugates. Animal- and protein-free.

Storage:	2 – 8 °C
pH-value at 19.0 – 21.0 °C:	6.1 ± 0.2
Preservative:	contains < 0.0014 % [w/w] reaction mass of CMIT/MIT (3:1)
Expiry date when stored unopened:	see label on the bottle
	For general laboratory use

Application

Dilution of Horseradish Peroxidase (HRP)-conjugated antibodies, proteins and biomolecules, as well as free HRP for long-term storage in solution at non-freezing temperatures, ensuring stability and functionality for subsequent use in immunoassays and related analytical applications.

Instructions for use

To prepare a working solution, *HRP-Defender (10x)* can be diluted up to 1:10 into another buffer - e.g. *Sample Buffer* (catalog no. 105 / 305) - before use (1 part of *HRP-Defender (10x)* + 9 parts of buffer).
Please shake *HRP-Defender (10x)* thoroughly prior to dilution.

HRP-Defender (10x) must **not** be diluted into **water**.

For unusually unstable HRP-conjugates, *HRP-Defender (10x)* may be used at a higher concentration - such as a 1:5 dilution - or even undiluted.

HRP-conjugates can be diluted and stored directly in the working solution of *HRP-Defender*. Typical conjugate concentrations in the final solution range from 40 to 500 ng/ml. Once diluted in a suitable buffer, *HRP-Defender* can directly be used as assay buffer in immunoassays.
HRP-Defender (10x) is designed for the storage of conjugates in solution at non-freezing temperatures (i.e. above 0 °C).

Stability data of one peroxidase conjugate cannot be directly transferred to other conjugates. Each conjugate must be tested for its individual shelf-life in the respective *HRP-Defender (10x)* working solution. If *HRP-Defender (10x)* is used in immunodiagnostic kits, the shelf life must be validated according to the applicable regulatory requirements for diagnostics.

HRP-Defender (10x) contains components that may interfere with commonly used conjugation methods, such as techniques targeting primary amines. Suitability for any given conjugation method must be tested in advance. We recommend diluting biomolecules in HRP-Defender dilutions only after conjugation.

If background or false-positive signals occur - e.g. due to cross-reactivities, matrix effects, or HAMA - we recommend diluting *HRP-Defender (10x)* into *LowCross-Buffer*® (catalog no. 100) or *LowCross-Buffer*® *protein-free* (catalog no. 300).
Suitability of *HRP-Defender (10x)* for a specific assay must be tested by the user.

HRP-Defender (10x) contains the preservative CMIT/MIT but is not sterile. To guarantee optimal stability, the respective dilution buffer should contain appropriate preservative levels.
Please note that high protein concentrations and/or microbial contamination may reduce the effectiveness of the preservative. If antibodies/conjugates are added for storage in a non-sterile manner and microbial contamination is suspected, higher-than-usual preservative concentrations may be required.

For further information please visit www.candor-bioscience.com.