

Technical Information

Buffer formulations

All buffers should be stored at 4°C. They are stable for 1 month after dilution/preparation. Use the prepared buffers at room temperature (20-25°C).

Washing buffer PBS-Tween

(pH 7.4; for 1000 ml)

in dist. water:

NaCl	8.00 g
KH ₂ PO ₄	0.20 g
Na ₂ HPO ₄	1.15 g
KCl	0.20 g
Tween 20	0.50 g

Contains no preservative. Use within 2 days or add 0.2 g/L NaN₃.
Washing buffer available as tablets for 1000 ml each, or as pre-mixed powder for larger amounts (Art. No. 110150/-54)

Coating buffer (pH 9.6; for 1000 ml)

in dist. water:

Na ₂ CO ₃	1.59 g
NaHCO ₃	2.93 g
NaN ₃	0.06 g

Coating buffer available as tablets for 100 ml each (Art. No. 110110/-12) 

Conjugate buffer (pH 7.4; for 1000 ml)

in dist. water (pH adjusted with HCl)


TRIS	2.40 g
NaCl	8.00 g
PVP K25 (MW 24000)	20.00 g
Tween 20	0.50 g
BSA (bovine serum albumin)	2.00 g
MgCl ₂ · 6 H ₂ O	0.20 g
KCl	0.20 g
NaN ₃	0.20 g

Conjugate buffer available as 10x concentrate (Art. No. 110140/-42)

Substrate buffer (pH 9.8; for 1000 ml)

in dist. water (pH adjusted with HCl)

Diethanolamine	105.7 g
MgCl ₂ · 6 H ₂ O	0.02 g
NaN ₃	0.20 g

Substrate buffer available as 5x concentrate (Art. No. 110130/-32)   

Extraction buffer «General»

(pH 7.4; for 1000 ml)

in dist. water (pH adjusted with HCl)

TRIS	2.40 g
NaCl	8.00 g
PVP K25 (MW 24000)	20.00 g
Tween 20	0.50 g
KCl	0.20 g
NaN ₃	0.20 g

Extraction buffer «General» available as 10x concentrate (Art. No. 110120)

Extraction buffer «Bulbs & Tubers»

(pH 7.4; for 1000 ml)

Extraction buffer «General»	1000 ml
Egg albumin (ovalbumin)	10.00 g

First dissolve 10 g of ovalbumin in about 20 ml of buffer and then make up to a total of 1000 ml with the remaining buffer. Prepare freshly before use.

Extraction buffer «General» (Art. No. 110120) and egg albumin (Art. No. 5461.1 or 5461.5), are available either separately or as extraction buffer «Bulbs & Tubers» set for 1000 samples (Art. No. 110122)

Extraction buffer «Grapevine»

(pH 8.2/ for 1000 ml)

in dist. water (pH adjusted with HCl)

TRIS	24.00 g
NaCl	8.00 g
PVP K25 (MW 24000)	20.00 g
PEG (MW 6000)	10.00 g
NaN ₃	0.20 g
Tween 20	0.50 g

Extraction buffer «Grapevine» available as 5x concentrate (Art. No. 110123)

Extraction buffers*

Please note that special extraction buffers are used for testing different plant samples.

- * ELISA Extraction buffer: Depending on the plant samples to be analyzed, a different extraction buffer is required. For most plants, the extraction buffer «General» is appropriate. For testing grapevines, the extraction buffer «Grapevine» is required. For testing tubers and sprouts of potatoes, bulbs of onion and other Allium spp. as well as for seeds, the extraction buffer «Bulbs & Tubers» is necessary. The information on appropriate use of extraction buffer is indicated on the «Product Information» delivered with the ELISA reagents.

Abbreviations: TRIS = Tris-(hydroxymethyl)aminomethane; PVP = Polyvinylpyrrolidone; PEG = Polyethylene glycol

Health Hazard:

To prevent microbial growth, the buffers contain 0.006% - 0.2 % sodium azide. Please refer to our Safety Data Sheets (SDS) on the download section on our website (<https://www.bioreba.ch/>) to have all information for correct and safe handling, first aid measures, storage and protection. Disposal in accordance with local regulations.

Version: 4 - 03.03.2025: Update of buffer recipes. Addition of GHS labels and removal of Extraction buffer „Caulimo“.