

Trypsin / Trypsin-Versene® (EDTA) / Versene® (EDTA)

Product Use

- **Trypsin** (17-160) is a clear, colorless-yellow, highly active porcine enzyme preparation, used to remove cells from the culture vessel surface into suspension. It is generally used at a working concentration of 0.25%, prepared in a balanced salt solution, without calcium or magnesium, at a pH of 7.6-7.8. After treatment, trypsin activity can be halted by adding a serum media mixture, or a Trypsin inhibitor (from soybean, for example) in serum-free systems.
- **Trypsin-Versene®** (17-161) or **Trypsin-EDTA** (ethylenediaminetetraacetic acid) is a combined reagent used to remove cells from the culture vessel surface into suspension. The EDTA, a chelator of divalent cations, is added to trypsin solutions to enhance activity. The calcium and magnesium in the extracellular matrix, which aids in cell-cell adhesion, also obscures the peptide bonds that trypsin acts on. The EDTA is added to remove the calcium and magnesium from the cell surface which allows trypsin to hydrolyze specific peptide bonds. This activity can be halted by adding a serum media mixture, or a Trypsin inhibitor (from soybean, for example) in serum-free systems. It is supplied at use dilution.
- **Versene®** (17-711) or **EDTA** (ethylenediamine-tetraacetic acid) is a chelating agent used to lift some cell types from the culture vessel surface into suspension. It can be used as a wash prior to the addition of a trypsin product or used as described above. It is supplied at use dilution.

Usage

17-160	Dilute 1:10 with HBSS (calcium and magnesium free)
17-161	Use as is
17-711	Use as is

Formula

Component (mg/L)	17-160	17-161	17-711
Glucose	1,000	1,000	--
KCl	400	400	200
KH ₂ PO ₄	60	--	200
NaCl	8,000	8,000	8,000
NaHCO ₃	--	580	--
NaH ₂ PO ₄ •7H ₂ O	90	--	2,170
Phenol Red	--	2.00	--
Trypsin	25,000	500	--
Versene® (EDTA)	--	200	200

Specifications

	Sterility	Mycoplasma	pH	Osmolality (mOsm)	Activity/Toxicity	Endotoxin (EU/ml)
17-160	Negative	Negative	6.44-8.04	313-565	Pass	--
17-161	Negative	Negative	7.10-7.90	269-297	Pass	< 10
17-711	Negative	--	7.08-7.50	275-291	Pass	< 1.0

Storage

-10°C to -20°C	17-160 and 17-161
15°C to 30°C	17-711

Product Use Statement

THESE PRODUCTS ARE FOR RESEARCH USE ONLY. Not approved for human or veterinary use, for application to humans or animals, or for use in clinical or *in vitro* procedures.

Ordering Information

Catalog Number	Description	Size
17-160E	Trypsin (10X)	100 ml
17-160F	Trypsin (10X)	500 ml
17-161E	Trypsin-Versene® (EDTA) (1X)	100 ml
17-161F	Trypsin-Versene® (EDTA) (1X)	500 ml
17-711E	Versene® (EDTA) 0.02%	100 ml

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