

Ultrafiltration / Amicon

Ultracel ultrafiltration membrane (made of regenerated cellulose)

With very low protein adsorption, it can concentrate and desalinate very dilute solutions. Its ultra-fine microstructure allows very high retentions with extremely low specific adsorption of proteins, DNA or other macromolecules. This membrane is available on the Amicon Ultra and Centricon Plus-70 range.

Durapore microporous membrane (PVDF)

With low protein adsorption and low extractables, it can be used to clarify samples, recover DNA from agarose gels and retain chromatography resins.

Durapore membranes allow the passage of soluble proteins or nucleic acids and retain cell fragments, whole cells or particles. The Durapore membrane is extremely hydrophilic and provides the lowest adsorption to proteins or other biomolecules of any microporous membrane on the market. The Durapore membrane is used in the Ultrafree-MC and CL.

See Amicon™ Ultra, Amicon™ Pro next page

Merck Millipore's Amicon family of products offers you the widest selection of ultrafiltration products for protein processing and molecular biology applications.

Centrifugal filtration allows biological samples to be concentrated, desalted, diafiltered and clarified quickly and reproducibly. Centrifugal filtration also reduces processing times, increases sample recovery efficiency, allows higher concentration factors to be achieved and further desalination of samples.

The choice of a centrifuge unit will depend on several factors:

- the starting concentration of the sample ;
- the starting volume ;
- the desired concentration factor ;
- the user's centrifuge equipment.

While some units favour high sample recovery efficiencies, others will allow for high ultrafiltration rates.

Membrane	Retention	Passage
Ultrafiltration	Proteins, DNA, viruses	Salts, sugars, amino acids, oligonucleotides
Microporous	Cells, precipitates, resins, beads, particles	Salts, proteins, nucleic acids, viruses

Sample type	Membrane	Material	Cut-off point
Dilute, extremely pure sample requiring low adsorption	Ultracel	Regenerated Cellulose	3000 Da, 10000 Da, 30000 Da, 50000 Da, 100000 Da
Cells, precipitate, bead, resin requiring the passage of molecules soluble such as proteins, nucleic acids or salts	Durapore	hydrophilic PVDF	0.1 µm, 0.2 µm, 0.45 µm, 0.65 µm, 5 µm

Amicon Ultra 0.5 and 2 ml



Centrifugal ultrafiltration device for dilute protein solutions. Insert tube with ultrafiltration membrane.

For the concentration and purification of proteins, antibodies and nucleic acids, desalting and diafiltration, removal of unincorporated primers, linkers and markers.

- ▶ **Very high reproducibility**
- ▶ **Numerous cut-off points available**
- ▶ **Very high sample recovery (>90%) due to reverse centrifugation method**
- ▶ **For PCR products purification, use 30 kDa units**

	Amicon Ultra 2 ml	Amicon Ultra 0.5 ml
Max. initial volume	2 ml	0.5 ml
Final volume	15 - 70 µl	15 - 20 µl
Max centrifugal force	4000 g (fixed rotor) 7500 g (tilting rotor)	14000 g
Tube format	-	Microtube 1.5 ml

Threshold of kDa cut-off	Amicon Ultra 0.5 ml						Amicon Ultra 2 ml			
	Cat.No. (8 units)	€ Excl. VAT (8 units)	Cat.No. (24 units)	€ Excl. VAT (24 units)	Cat.No. (96 units)	€ Excl. VAT (96 units)	Cat.No. (500 units)	€ Excl. VAT (500 units)	Cat.No. (24 units)	€ Excl. VAT (24 units)
3	051823	NC -	051824	NC -	051826	NC -	051831	NC -	053716	NC -
10	051828	NC -	051829	NC -	051830	NC -	051827	NC -	053717	NC -
30	051850	NC -	051851	NC -	051852	NC -	051853	NC -	053718	NC -
50	051854	NC -	051855	NC -	051856	NC -	051857	NC -	053719	NC -
100**	051858	NC -	051859	NC -	051860	NC -	051861	NC -	053720	NC -

** Max. centri force : 5000 g for proteins / 2000 g for nucleic acids



Enter the Cat. No. on www.dulis.nl to see the Investigative Genetics guide.