PLANOVA™ S20N Spotlight Vol. 1

for Plasma Derivatives

Next Generation Superior Cellulose Membrane

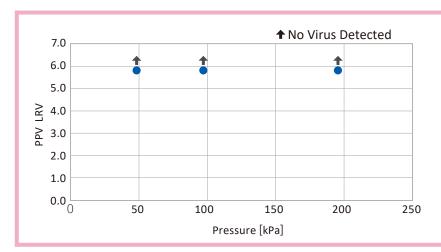
KEY FEATURES

Robust Virus Removal Capability Across various viruses

- 1 Over a wide pressure range
- 2 After long process pause

1. Planova™ S20N exhibits high virus removability regardless of filtration pressure

» Achieved PPV LRV ≥ 5.8 under various pressure conditions

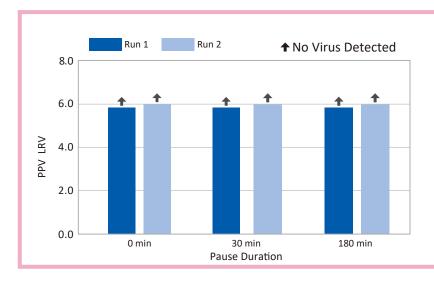


Filtration Conditions

- Solution condition: 10 mg/mL h-lgG, 100 mM NaCl
- Virus: PPV
- Filtered volume: 300 L/m² (n=3 / each pressure)
- Pressure: 49 kPa (7.1 psi), 98 kPa (14.2 psi), 196 kPa (28.4 psi) *Operating pressure of S20N: ≤ 216 kPa (31.3 psi)

2. Planova™ S20N shows high virus removability after long process pause

- » Achieved PPV LRV ≥ 5.7 after 180 minutes of process pause
- » Planova S20N maintains high virus removal performance after buffer chase



Filtration Conditions Pause Virus Buffer filtration chase 196 kPa 0 kPa 196 kPa 150 L/m² 15 L/m²

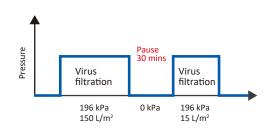
- Solution condition: 10 mg/mL h-lgG, 100 mM NaCl
- Virus: PPV
- Filtration run: n=2
- Pressure: 196 kPa (28.4 psi)

3. Planova™ S20N demonstrates robust virus removal capability for various types of virus

» Maintains LRV ≥ 4.1 in various types of viruses, enabling the production of safe and reliable plasma products

Virus	Size (nm)	Total pool LRV after 30 min process pause
PPV	18-24	≥ 5.8
EMCV	25-30	≥ 5.9
BVDV	50-70	≥ 5.9
HIV	80-120	≥ 4.1
PRV	120-200	≥ 5.4

Filtration Conditions



• Solution condition: 1 mg/mL h-lgG, 100 mM NaCl

Filtration run: n=2 / virusPressure: 196 kPa (28.4 psi)

TAS37022 Asahi Kasei Medical (adopted)

Planova™ S20N Technical Support and Training Service

- » Responsive technical support and training from virus filtration experts
- » Hands-on training with Planova Operators Course (both in-person and virtual)
- » Full support across all phases from process development to manufacturing



From Asahi Kasei Bioprocess

Through innovation and willingness to listen to our customers, we have newly developed the Planova S20N as Planova filters made from regenerated cellulose hollow fiber membranes. Planova S20N shows higher throughput, robust virus removal capability, and stable protein filterability at higher operating pressures. Planova S20N is specifically designed to improve user-friendly operation while achieving stable filtration over a wide range of solution conditions, inherited from Planova 20N. We aim to provide "Assurance Beyond Expectation" to ensure product safety and manufacturing efficiency for therapeutics in the form of innovative yet exceptionally reliable purification consumables, equipment and support services.







