

# PLANOVA™ S20N Spotlight Vol. 4

## for Plasma Derivatives

### Next Generation Superior Cellulose Membrane

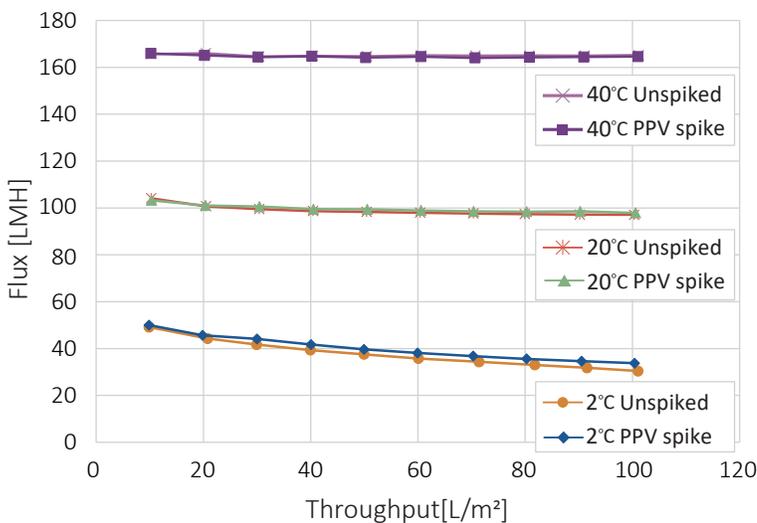
#### KEY FEATURE : A More Versatile solution

1. Stable flux unaffected by virus spiking
2. Robust virus removability under various buffer conditions
3. Reliable filtration with or without surfactants



#### 1. Planova™ S20N demonstrates stable flux performance at temperatures from 2 to 40 °C

» Achieved PPV LRV of 5.7 or greater with no virus detected and showed stable filtration unaffected by virus spiking



#### Filtration Conditions

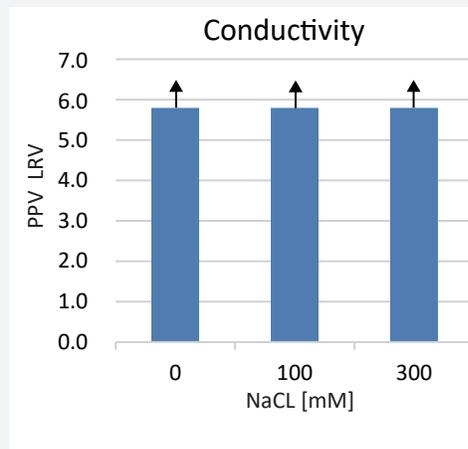
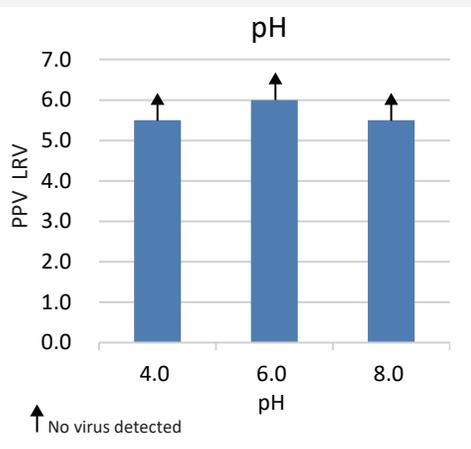
Constant pressure mode, 196 kPa  
10 mg/mL h-IgG, 100 mM NaCl, pH 4.5

Temperature	Virus	Average flux (LMH)	PPV LRV
40 °C	Unspiked	165	--
40 °C	PPV spike	165	≥5.7
20 °C	Unspiked	99	--
20 °C	PPV spike	100	≥6.0
2 °C	Unspiked	38	--
2 °C	PPV spike	40	≥6.2

TAS37022 Asahi Kasei Life Science (adapted)

#### 2. Planova S20N performed robust virus removal even under various buffer conditions

» Virus removal capability was unaffected over a range of pH and conductivity



#### Filtration Conditions

Constant pressure mode  
196 kPa, 10 mg/mL h-IgG  
Filtration volume 300 L/m<sup>2</sup> or 3h

**pH:** pH 4.0, 6.0 and 8.0  
100 mM NaCl

**Conductivity:** 0, 100 and 300 mM NaCl  
all at pH 4.5

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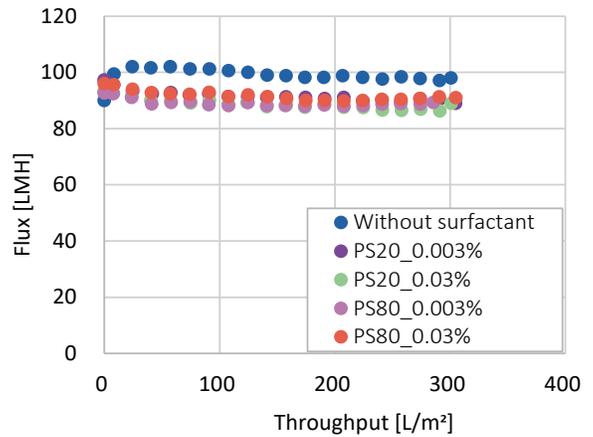
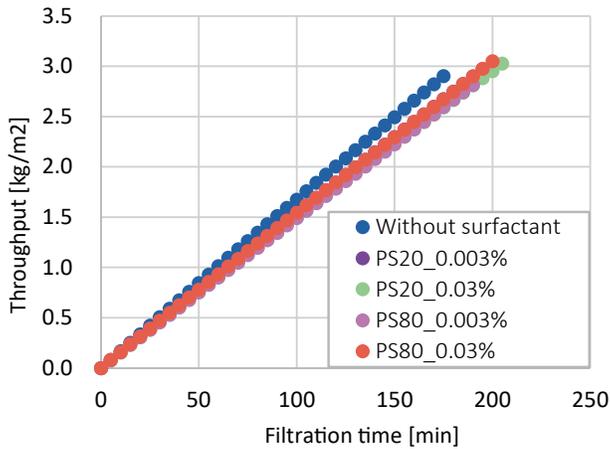
### 3. Planova S20N provides stable filtration performance, even in the presence of surfactants

» Addition of surfactant for process improvement did not affect throughput or flux

#### Filtration Conditions

Constant pressure mode, 196 kPa  
10 mg/mL h-IgG, 100 mM NaCl, pH 4.5

PS20: Polysorbate 20  
PS80: Polysorbate 80



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### Planova S20N Filter Specifications

Effective Service (m <sup>2</sup> )	4.0, 1.0, 0.3, 0.1, 0.01 and 0.001
Hollow fiber membrane	Cuprammonium regenerated cellulose
Operating pressure (TMP)	≤ 216 kPa (31.3 psi)
Integrity test	Leakage test
Supplied as	Ready to use (Autoclaved, filled with purified water*)

\*Purified water in 4.0 m<sup>2</sup> Planova S20N filters contains < 0.1% NaCl

### 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

Planova S20N, as highlighted in previous Spotlights, combine robust virus filtration capability and high throughput with a user-friendly design. Furthermore, as demonstrated here, stable filtration performance can be achieved across a broad range of solution conditions, conferring the confidence to select solution conditions that further optimize your processes. By integrating Planova S20N into your workflow, you secure a filtration solution engineered for reliability, scalability, and consistent performance to support the highest standards in bioprocessing.

**PLANOVA™**  
Assurance Beyond Expectation

