



Fact sheet	Groningen	Montreal
		
Animal cell culture area Microbial fermentation Process development Total area	700 m <sup>2</sup> 150 m <sup>2</sup> 140 m <sup>2</sup> 2,400 m <sup>2</sup>	670 m <sup>2</sup> 410 m <sup>2</sup> 1,400 m <sup>2</sup> 6,500 m <sup>2</sup>
<b>GMP manufacturing</b>		
Animal cell culture	50 L (continuous perfusion) 250 L (continuous perfusion)	50 L (continuous perfusion) 500 L (continuous perfusion)
Microbial fermentation	70 L 500 L	2000 L 200 L 3500 L
<b>Purification equipment</b>		
Animal cell culture	Centrifuges; UF; Chromatography; Controlled rate freezer	Centrifuges; UF; Chromatography; Controlled rate freezer
Microbial fermentation	Centrifuges; UF&MF; Homogenizer; 1,200 L refolding tank	Centrifuges (disc stack, tubular bowl); UF&MF; Homogenizer; 6,000 L refolding tank; 3,000 L media preparation tanks
<b>Clean rooms</b>		
Animal cell culture	<b>Class 10,000</b> 8 preculture and fermentation suites; 2 concentration and clarification suites; 2 purification and bulk fill suites; 4 cold suites; 1 media & buffer hold;	<b>Class 10,000</b> 3 preculture suites; 3 fermentation, concentration/clarification suites*;
	<b>Class 100,000</b> 1 media & buffer prep suite; 2 cleaning & autoclaving suite.	2 purification suites prior to viral inactivation**; 2 purification & formulation**; 1 suite bulk filling; 1 cool down suite;
Microbial fermentation	<b>Class 100,000</b> 3 preculture and fermentation suites; 1 primary recovery suite.	<b>Class 100,000</b> 2 cleaning/autoclaving suites.
		<b>Class 10,000</b> 1 preculture suite; 1 purification & formulation**; 1 bulk filling suite; 1 cool down suite;
		<b>Class 100,000</b> 1 fermentation/primary recovery suite; 2 cleaning/autoclaving suites.
<b>Utilities</b>	Specification upon request	Specifications upon request

\* Including media prep/storage

\*\* Including buffer prep/storage