

General Equipment List

Description	Vendor(s)	Quantity
Atomic Absorption Spectrophotomer	Perkin Elmer	2
Coagulation Analyzer	Beckman Coulter, Bio Merieux	3
Density Meter	Anton Paar	1
Disintegration Bath	VanKel	4
Dissolution System I & II	Distek, VanKel, Varian	25
Dissolution System III	VanKel	1
Dissolution System IV	Erweka	1
DSC/TGA	TA Instruments	1
Flame Photometer	Instrumentation Laboratory, Cole-Parmer	2
Friabilator	VanKel	1
FTIR Spectrometer (MIR and NIR)	Bruker	1
Gas Chromatographs (FID, TCD, μ ECD, FPD detectors, Split/Splitless, Cool on Column, Packed)	Agilent Technologies, Perkin Elmer	14
GC/MS (CI and EI detectors)	Agilent	1
Hardness Tester	Vector Corporation, VanKel	2
HPLC Systems (UV, Fluorescence, Refractive Index, Evaporative Light Scattering, and Diode Array detectors)	Waters	20
	Shimadzu	15
	Agilent	100
	Beckman	2
	Perkin Elmer	20
Ion Chromatograph	Dionex	3
Karl Fischer Coulometric Titrator	EM Science, Mettler	4
Karl Fischer Coulometric Titrator with Headspace Oven attachment	Mettler	1
Karl Fischer Volumetric Titrator	Mettler	4
Karl Fischer Volumetric Titrator with Oven attachment	Mettler	1

General Equipment List

Description	Vendor(s)	Quantity
Laser Photometer (MALLS Detector), and Interferimetric Refractometer	Wyatt	1 1
LC/MS	MDS Sciex	4
Liquid Particle Counter	HIAC/Royco	3
Melting Point Apparatus	Mettler Toledo, Electrothermal	2
Micron Air Jet Sieve	Hosokawa	1
Microscope	Leitz-MicroLab, Nikon	3
Osmometer	Advanced Instruments	3
Oxygen Analyzer	Mocon, PBI Dansensor, Orbisphere	4
Package Leak Tester	Takachiho Seiki	2
Particle Analyzer	NiComp	1
Particle Analyzer	Horiba	1
Polarimeter	Rudolph	1
Refractometer	Bellingham & Stanley	1
Sieve Shaker (Ro-Tap)	W.S. Tyler	1
Spectrofluorometer	McPherson	1
Tapped Density Meter	VanKel	1
Titrator	Brinkmann, Mettler	3
Torque Tester	Secure Pak	1
Total Organic Carbon Analyzer	Shimadzu	2
UV/Vis Spectrophotometer	Hitachi, ATI, Agilent, Hunter, Nicolet	6
Viscometer	Brookfield, Haake	4
Water Vapor Sorption Analyzer	VTI	1

Inhalation Equipment List

Description	Vendor(s)	Quantity
Cascade Impactor	Andersen, ThermoAnderson	26
Critical Flow Control Box TPK	Copley Instruments	1
Copley Inhaler Testing Data Analysis Software (CITDAS)	Copley Instruments	2
Flow Meters	Sierra Instruments TSI	16 16
High Capacity Vacuum Pumps	Gast Manufacturing Corp	10
Laser Particle Analyzer	Malvern Instruments	3
Marple Miller Impactor	MSP Corporation	1
Multi-stage Liquid Impinger	Copley Instruments	1
MDI Automated Bursting Station	Innova Systems	2
Nasal Spray Pump Actuation Station	InnovaSystems	4
Nasal Spray Dose Collection Station	InnovaSystems	1
Next Generation Impactor	MSP Corporation	1
SprayVIEW, Spray Pattern Station	Image Therm Engineering	1
SprayVIEW, Plume Geometry Station	Image Therm Engineering	1

Biopharm Equipment List

Description	Vendor(s)	Quantity
Capillary Electrophoresis System	Beckman	4
Centrifuge	Beckman, Eppendorf	3
Densitometer	Molecular Dynamics/Amersham	1
ELISA plate washer	Bio-Tek Instruments	1
Freeze Dry System/Lyphilizer	Labconco	1
Gel Electrophoresis Tank	BioRad, Invitrogen, Amersham	6
Gel Electrophoresis Unit	Amersham	1
Heat Block	Barnstead/Thermolyne	1
Hydrolysis/Derivatization Station	Eldex	1
Image Analyzer	Aplha Innotech FluorChem IS-8800	1
pH Meter	Accumet	1
Shaker	Barnstead/Thermolyne, Lab-Line Instruments	5
Phast Electrophoresis	Amersham	1
Protean IEF cell	Biorad	1
Rotary Evaporator	Labconco	1
Shaker	Barnstead/Thermolyne, Lab-Line Instruments	5
Spectralight Jr. Viewing booth	GretagMacbeth	1
Spectrophotometer/ELISA plate reader	Molecular Devices	1
Ultra-Centrifuge	Beckman	1
Ultrasonic Bath	Branson	1
Vortex Genie 2	Fischer Scientific	1

Biopharm Equipment List

Description	Vendor(s)	Quantity
Western Blot Transferring Tank	BioRad	2
Western Processor	BioRad	2
Futura*	Beckman and Coulter	2
SEC-MALLs**	Wyatt	1

* Equipment shared between BioPharm and Analytical Development

** Equipment shared among all groups

Please Note:

Common equipment: multiple HPLC units equipped with different detectors such as refractive index (RI), UV-visible, fluorescence (FL), evaporative light scattering detector (ELSD) along with binary and quaternary pump, chiller, degasser, auto samplers, et