



When it's
YOUR
API,
every step
matters.

Pfizer CentreOne specializes in
small-molecule API synthesis.

We can perform almost any
kind of chemistry you need.

The expertise you need.
The attention you deserve.

Our capabilities include:

- Complex organic synthesis
- Fermentation and bioprocessing up to 150,000-liter scale
- Milling and micronizing
- Process optimization and scale-up

You can rely on us for high-quality API synthesis,
from process development through long-term supply.

Custom API

API development and manufacturing is complex.
You can count on us to guide you.

Capabilities at a glance

- Manufacturing locations**
- Kalamazoo, Michigan, USA
 - Cork, Ireland
 - Ringaskiddy
 - Little Island

Compound types Most small molecules excluding cytotoxics, penicillins and betalactams

Batch sizes From 100 grams to 3+ metric tons

- Analytical development**
- cGMP-compliant laboratories
 - Full suite of analytical tools
 - Method development services
 - Structure elucidation

- Process development**
- Route selection
 - Process optimization, including
 - Telescoping
 - Reaction monitoring through PAT
 - Process throughput
 - Cleaning method development, validation and recovery studies
 - Pilot/scale-up

- Other services**
- Stability
 - Raw material sourcing
 - Cleaning validation
 - API CMC support
 - Process safety management

Regulatory Overview

Regulatory	U.S. site	Cork, Ireland, sites	
	Kalamazoo, MI	Ringaskiddy	Little Island
cGMP inspections	ANVISA, EMA, China FDA, FDA, Health Canada, MHRA, PMDA, Korean FDA, TGA	ANVISA, EMA, FDA, HPRA (IMB), Korean FDA, PMDA	ANVISA, EMA, FDA, HPRA (IMB), Korean FDA, PMDA

Our collaboration with you begins as early as Phase II.

Custom API

Scale-up is a challenge.
It's good to rely on a team that already knows the route.

Capabilities at a glance

Capabilities by site	U.S. site	Cork, Ireland, sites	
	Kalamazoo MI	Ringaskiddy	Little Island
Organic Synthesis			
Hydrogenation	●	●	●
Acetylene chemistry	●		
Cyanide	●		
Hydrofluoric acid	●		
Hydride	●	●	●
Cryogenic processing	●	●	●
Gaseous HCl	●	●	●
Organometallic (Grignard/organometallic)	●	●	●
DIBAL reductions	●	●	●
Chlorine	●		
Chromatography	●		
Chlorinated solvents	●	●	●
Ozone	●		
Particle Sizing			
Sieving	●	●	●
Air classifier milling	●	●	
Comil (low-energy deagglomeration)	●	●	●
Hammer mill	●	●	●
Sturtevant micronizer	●		
Jetpharma micronizer	●	small scale	small scale

Capabilities by site	U.S. site	Cork, Ireland, sites	
	Kalamazoo MI	Ringaskiddy	Little Island
Fermentation and Bioprocessing			
Microbial/small-molecule fermentation	●		
Algae, E coli, yeast fermentation	●		
Biotransformations	●		
Enzymatic conversions	●	●	●
Centrifugation	●		
Decanting centrifugation	●		
Resin adsorption	●		
Nanofiltration	●		
Pilot-scale capabilities	●		
Culture/process development	●		
Containment and Segregation			
Potent	●	●	●
OEL: < 1 µg/m ³ (0.5-60 kg)	●		●
OEL: 1-10 µg/m ³	●	●	●
Controlled substance CII, CIII	●	●	●
Steroids and hormones	●		
Prostaglandins	●		



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