ICGEB International Centre for Genetic Engineering and Biotechnology | TECHNOLOGIES

BACTERIAL PLATFORM

MOLECULE NAME	EXPRESSION SYSTEM	PRODUCTION MODE	PURE PRODUCT PER BATCH	TOTAL DOSES PER BATCH (dose in mg)
IFNalfa2A	E. coli	Batch (30 L)	5 g	160,000 (0.03)
PEGIFNalfa2a	E. coli	Batch (30 L)	Pure Reagent 8 g Final product 1 g	5500 (0.18)
IFNalfa2b	E. coli	Batch (30 L)	3 g	100,000 (0.03)
GCSF (Filgrastim)	E. coli	Batch (10 L)	3 g	10,000 (0.3)
PEGGCSF	E. coli	Batch (10 L)	Pure Reagent 8 g Final product 2 g	330 (6)

MAMMALIAN CELL PLATFORM

MOLECULE NAME	EXPRESSION SYSTEM	PRODUCTION MODE	PURE PRODUCT PER BATCH	TOTAL DOSES PER BATCH (dose in mg)
EPO alpha	CHO	10 Roller bottles (10 L media)	30 mg	300 (0.1)
EPO beta	CHO	Perfusion (RV = 1 L) (15 days / 15 L media)	60 mg	600 (0.1)
PEGEPO	CHO	Roller bottles (10) or Perfusion (15 days)	Pure Reagent 7 g Final product 12 mg	150 (0.075)

YEAST PLATFORM

MOLECULE NAME	EXPRESSION SYSTEM	PRODUCTION MODE	PURE PRODUCT PER BATCH	TOTAL DOSES PER BATCH (dose in mg)
Insulin	P. pastoris	Fed-batch (10 L)	10.5 g	3000 (3.5)
Insulin Detemir	P. pastoris	Insuin precursor 2.3 g Reagent 10 g	Pure Reagent 6 g Final product 0.46 g	30 (14.2)
Growth hormone	P. pastoris	Fed-batch (10 L)	2 g	400 (5)

The BDU has developed research grade strains, upstream and downstream protocols as well as QC testing for 12 biologics.

European Pharmacopoeia Monographs are scientific guidelines relating to quality (physicochemical, immunochemical properties, biological activity, impurities)

If your Company / Institute is interested in:

Technology transfer opportunities and Training in biotechnology development, technical assistance for product development and Quality Control services

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