

# Establishment of an Embryo Implantation Model In Vitro

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## Materials

Name	Company	Catalog Number	Comments
17-β-estradiol	SIGMA	3301	Most potent mammalian estrogenic hormone
BD Falcon	BD	353001	Bacteriological Petri Dishes 35 x 10 mm style w/tight lid, crystal-grade virgin polystyrene, sterile
Biosafety Cabinet	ESCO	class II BSC	Aseptic operations, making culture dishes, aliquoting reagents, etc
CO <sub>2</sub> Incubator	Thermo	8000DH	Embryo culture
Culture plate	Corning	3506	Cell culture
DMEM/F12	Gibco	1133032	DMEM/F12 (1x), liquid 1:1, Contains L-glutamine and 15 mM HEPES buffer
Fetal Bovine Serum	Gibco	10099141	Fetal Bovine Serum, Qualified, Australia Origin
Gelatin	SIGMA	G9391	Type B, powder, BioReagent, suitable for cell culture
HCG	Nanjing Aibei	M2520	Sterilization reagent, intraperitoneal injection, 50 IU/mL
Hyaluronidase	SIGMA	V900833	Reagent grade, powder
KSOM	Merck	MR-020P-D	(1x), Powder, w/o Phenol Red, 5 x 10 mL
L-glutamine	Gibco	25030081	L-glutamine-200 mM (100x), liquid
M2	Merck	MR-015-D	EmbryoMax M2 Medium (1x), Liquid, with Phenol Red
Mineral oil	SIGMA	M8410	Mineral oil is suitable for use as a cover layer to control evaporation and cross-contamination in various molecular biology applications
Penicillin-Streptomycin, liquid	Gibco	15140122	10,000 Units penicillin (base) and 10,000 units streptomycin (base), utilizing penicillin G (sodium salt) and streptomycin sulfate in 0.85% saline
PMSG	Nanjing Aibei	M2620	Sterilization reagent ,intraperitoneal injection, 50 IU/mL

Progesterone	SIGMA	5341	Steroid hormone secreted by the corpus luteum during the latter half of the menstrual cycle
Sodium pyruvate	Gibco	11360070	Sodium pyruvate is commonly added to cell culture media as a carbon source in addition to glucose
Stereomicroscope	Olympus	SZX7	Embryo retrieval and observation of embryo development