

ESGRO-2i Medium, 100ml ESGRO-2i medium is a defined, LIF containing medium provided with a selective GSK3beta & Mek 1/2 inhibitors to enhance viability of mouse embryonic stem & iPS cells in the absence of serum & feeder cells. Supports a naive/ground pluripotent state.

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Unit EA

Description

Two stages of mouse pluripotency have been stabilized to date through in vitro culture. 'Naive' represents the earliest stage, which can be enriched for a purer population, termed 'ground state'. Naive most closely approximates embryonic epiblast in the preimplantation blastocyst. The primed state most closely approximates in vivo immediate postimplantation epiblast. There are clear differences between these stages in culture, expression, epigenetics (including appropriate X-inactivation) and developmental competence. The fact that naive mESCs can generate whole animals through tetraploid complementation while primed mESCs cannot, is a particularly compelling reason for heightened expectations from naive hESCs. ESGRO-2i medium is a defined, LIF containing medium provided with a selective GSK3beta and Mek 1/2 inhibitors to enhance viability of mouse embryonic stem (ES) and induced pluripotent stem (iPS) cells and increased maintenance of pluripotency in the absence of serum and feeder cells. This medium is intended for cell expansion and growth at clonal density in serum-free conditions and supports a naive/ground pluripotent state.