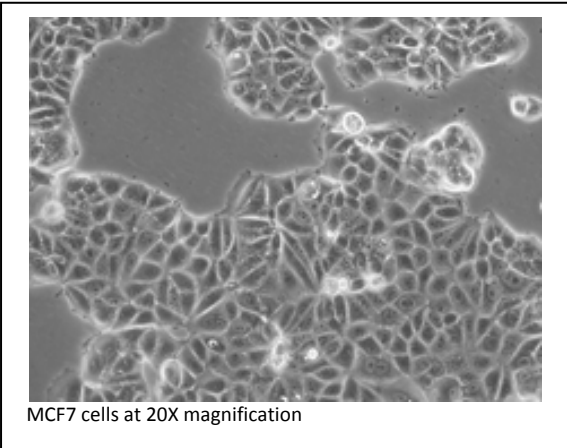


MCF7 cells

Handling suggestions for MCF7 cells

MCF-7 is a widely used epithelial cancer cell line, derived from breast adenocarcinoma. MCF7 cells retain characteristics of differentiated mammary epithelium, including ability to process estradiol via cytoplasmic estrogen receptors. Although easy to propagate, the cells are generally slow-growing. MCF7 cells are useful for detecting MAPK and PI3K components, and ERK and Akt phosphorylation are readily detectable in these cells. MCF7 cells express particularly high levels of p70S6K, and as such can be a useful marker for upstream kinases such as mTOR and PDK-1.



Cell type: epithelial
Disease: breast carcinoma
Growth: adherent
Organism: Human
Sources: ATCC Cat#HTB-22
ECACC Cat# 86012803

Suggested media:
MEM (Gibco Cat#11095) supplemented with 10% FBS (Gibco)
1% Non-essential amino acids (Gibco Cat#11140)
1% Sodium pyruvate (Gibco Cat#11360)
1% Pen Strep Glutamine (Gibco Cat#10378)

Culturing suggestions:
Split 1:2 - 1:3 when 60-80% confluent.
Media changes every 2-3 days.

Detectable signaling pathways:
MAPK
PI3-K
mTOR

Known Receptors:
IGFR, estrogen

Cells may carry B or C type retrovirus and are considered to represent a category 2 pathogen (P2 containment).