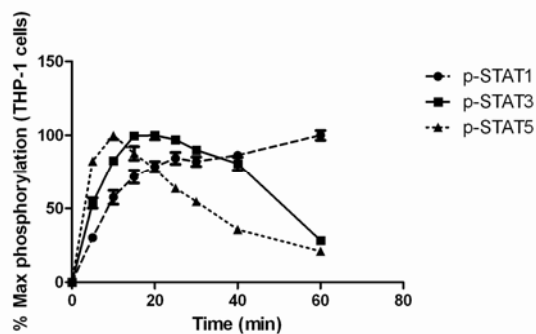


THP-1 cells

Handling suggestions for THP-1 cells

THP-1 cells are monocytes isolated from peripheral blood of a patient suffering acute monocytic leukemia. THP-1 cells have Fc and C3b receptors and lack surface and cytoplasmic immunoglobulins. IL-6 and GM-CSF receptors have also been detected in these cells. As a model for cell signaling, THP-1 cells are useful for the detection of ERK, p38 MAPK and JNK signaling, as well as cytokine receptor-mediated STAT signaling.



Timecourse of stimulation of STAT phosphorylation in THP-1 cells. STAT 1 phosphorylation is stimulated by IFN γ , STAT3 phosphorylation is stimulated by IL-6 and STAT5 phosphorylation is stimulated by GM-CSF. Phosphorylation detected by AlphaScreen® SureFire® cellular assay kits.

Morphology: monocyte

Source: blood

Growth: suspension

Organism: Human

Sources: ATCC: TIB-202

ECACC Cat# 88081201

Suggested media:

RPMI (Gibco Cat#11885) supplemented with 10% FBS (Gibco)

1% Sodium pyruvate (Gibco Cat#11360)

1% Pen Strep Glutamine (Gibco Cat#10378)

Culturing suggestions:

Maintain cells at densities in the range of 2×10^5 – 10^6 cells/mL.

Add fresh media as required.

Detectable signaling pathways:

STAT,

ERK

p38

JNK

Known Receptors:

Fc, C3b, GM-CSF, IFN γ