

TLR4 Knockout cell line (THP-1)

Catalog Number: KO00721

Product Information	
Product Name	TLR4 Knockout cell line (THP-1)
specification	1*10 ⁶
Storage and transportation	Dry ice preservation/T25 live cell transportation.
Cell morphology	Monocytes, suspended growth
Passage ratio	1 : 2-1 : 4
species	Human
Gene	TLR4
Gene ID	7099
Build method	Electric rotation method / virus method
Mycoplasma testing	Negative
Cultivation system	90%RPMI-1640+10%FBS
Parental Cell Line	THP-1
Quality Control	Genotype: TLR4 Knockout cell line (THP-1) >95% viability before freezing. All cells were tested and found to be free of bacterial, viruses, mycoplasma and other toxins.

Gene Information	
Gene Official Full Name	toll like receptor 4provided by HGNC
Also known as	TOLL; CD284; TLR-4; ARMD10
Gene Description	The protein encoded by this gene is a member of the Toll-like receptor (TLR) family which plays a fundamental role in pathogen recognition and activation of innate immunity. TLRs are highly conserved from Drosophila to humans and share structural and functional similarities. They recognize pathogen-associated molecular patterns that are expressed on infectious agents, and mediate the production of cytokines necessary for the development of effective immunity. The various TLRs exhibit different patterns of expression. In silico studies have found a particularly strong binding of surface TLR4 with the spike protein of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the causative agent of Coronavirus disease-2019 (COVID-19). This receptor has also been implicated in signal transduction events induced by lipopolysaccharide (LPS) found in most gram-negative bacteria. Mutations in this gene have been associated with differences in LPS responsiveness, and with susceptibility to age-related macular degeneration. Multiple

	transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2020]
Expression	Broad expression in spleen (RPKM 17.1), appendix (RPKM 15.6) and 22 other tissues See more