CHIMERIC TLR9/TLR4 REPORTER CELL LINE

Tech ID: 24287 / UC Case 2015-018-0

BRIEF DESCRIPTION

This is a cell line that expresses a chimeric protein consisting of the extracellular domain of Toll-like receptor 9 (TLR9) fused to the transmembrane and cytosolic domains of TLR4 (hereafter referred to as TLR9N4C.

TLRs are innate immune receptors that respond to microbial ligands and in some cases self-ligands.

Responses to self- ligands can lead to autoimmune or autoinflammatory diseases.

SUGGESTED USES

- Screening for compounds that impact activation of TLR9 (activators or inhibitors)
- Determination of mechanism of action of said compounds (chimeric receptor separates ligand binding from intracellular signaling.
- Detection of TLR9 ligands in samples

ADVANTAGES

The development of inhibitors of certain TLRs has been a goal of the pharmaceutical industry. A primary application of this TLR9N4C-expressing cell line is to screen for inhibitors of TLR9. UCB is willing to license this cell line to screen for inhibitors of TLR9 activation.

RELATED MATERIALS

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OTHER INFORMATION

KEYWORDS

TLR9 Cell LIne

CATEGORIZED AS

» **Biotechnology**

» Health

» **Medical**

» New Chemical Entities, Drug Leads

RELATED CASES

2015-018-0

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

▶ Cell Intrinsic Modulation of TLR Function for Cell Therapy