Docket #: S95-006

G-Protein-Linked Receptor-Transfected Lymphoid Cell as Tools for Drug Discovery and for Cellular Therapeutics

This invention consists of mouse L1/2 pre B cells and human Jurkat cells transfected with serpentine receptors. These cell lines have been shown to be induced by specific ligands to activate lymphoid cell integrins and hence cell adhesion. In many instances, they have been shown to support lymphoid cell chemotaxis as well.

Available cell lines include:

L1/2 mouse pre B cells transfected with:
-- IL8 receptor A
-- IL8 receptor B
-- the human C5a receptor
-- the human formyl peptide receptor
-- CC-CKR-1, the human MIP1a/RANTES receptor

Human Jurkat T cells transfected with:
-- IL8 receptor A

Applications

- A tool to screen drugs inhibiting the pathway leading from chemoattractant/ agonist to receptor binding to intracellular signaling to integrin activation and cytoskeletal remodeling and hence to adhesion and chemotaxis.

Advantages

- High throughput screening

Publications

- Honda, S. et al Butcher, E.C., Journal of Immunology. 152:4026-4035, 1994.

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