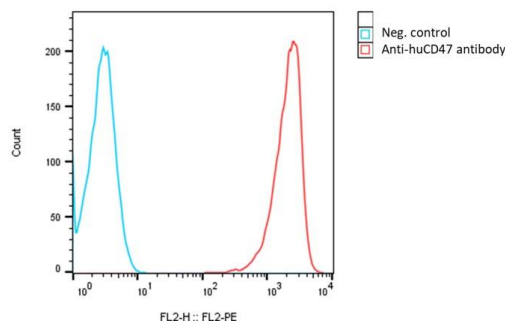


SPECIFICATIONS

| | |
|-------------------------|--|
| Catalog Number | C3017 |
| Cell Line Name | Human CD47-CHO-K1 stable cell line |
| Accession Number | Full-length human CD47 (NP_001768.1) |
| Host Cell | Adherent CHO-K1 |
| Quantity | Two vials of frozen cells (1x10 ⁶ per vial) |
| Culture Medium | DMEM with 10% FBS, 4µg/ml puromycin |
| Freezing Medium | 90% FBS and 10% DMSO |
| Storage | Liquid nitrogen |

DATA

Detection of human CD47 expression on CHO-K1 cells using a recombinant human anti-CD47 monoclonal antibody (Cat. #A1011) specific for human CD47, followed by staining with a PE-anti-human IgG antibody.


BACKGROUND

CD47 is a transmembrane protein that belongs to the immunoglobulin (Ig) superfamily and regulates phagocytosis by macrophages. Binding of CD47 to its counter-receptor, SIRP α , on macrophages leads to inhibition of phagocytosis. CD47 is widely expressed in normal tissues but is highly expressed on cell surface of many types of cancer, including human acute myeloid leukemia (AML) and small-cell lung cancer (SCLC). CD47 serves as a don't-eat-me signal and its overexpression is a mechanism for cancer cells to evade immune surveillance. Blocking the interaction of CD47 with SIRP α by anti-CD47 blocking antibody leads to increased phagocytosis and tumor growth inhibition.

References

- McCracken MN, Cha AC, Weissman IL. Molecular pathways: activating T cells after cancer cell phagocytosis from blockade of CD47 "don't eat me" signals. *Clin Cancer Res.* 21:3597-601. 2015.
- Liu, J. et al., Pre-clinical development of a humanized anti-CD47 antibody with anti-cancer therapeutic potential. *PLOS ONE.* 10(9):e0137345, 2015.

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