DNA Aptamer against MCF-7 Breast Cancer Cells

SKU# APT-065: DNA Aptamer against MCF-7 Breast Cancer Cells

Background

MCF-7 (Michigan Cancer Foundation-7) is a breast cancer cell line isolated in 1970 from a 69-year-old White woman and was established in 1973 by Herbert Soule and co-workers. MCF-7 breast cancer cell line retained several characteristics of differentiated mammary epithelium, including the ability to process estradiol via cytoplasmic estrogen receptors and the capability of forming domes. Tumor necrosis factor alpha (TNF alpha) inhibits the growth of MCF-7 breast cancer cells. Treatment with anti-estrogens can modulate the secretion of insulin-like growth factor binding proteins. Omega-3 and 6 fatty acids such as EPA, DHA and AA, have been reported to inhibit MCF-7 cell line growth and proliferation. PIK3CA helical mutations were identified in MCF-7, but with low AKT activation.

Aptamer type: DNA aptamer

Aptamer length: 26 bp

Affinity KD: 30-50 nM by Cell-SELEX

Kit contents

The following components are included in the Kit.

	Component	Quantity
APT-065-10	Single strand DNA, lyophilized powder	10 nmol
APT-065-30	Single strand DNA, lyophilized powder	30 nmol

- Store at -20°; reagents are guaranteed stable for 12 months when properly stored.