

The Eurofins Viracor ExPeCT™ (Expansion and Persistence of CAR T-cells) anti-CD19 (FMC63 or obe-cel) CAR T Assay is an intervention tool that allows the Clinical team to directly monitor the effectiveness of the CAR T-cell

For Hematology/Oncology patients the ExPeCT™ anti-CD19 CAR T assays provide interventional data which may provide information on the expansion and persistence of the genetically modified T-cells used as therapeutic treatment for specific lymphomas and leukemias (Chimeric Antigen Receptor T-cell therapy or CAR T). Eurofins Viracor has developed and validated a multiplexed quantitative real-time PCR (qPCR) assay allowing for the longitudinal monitoring of CD19-directed CAR T-cell therapy.

Monitoring of CAR T-cell expansion and persistence can provide important insight into therapeutic efficacy, durability of response, potential for relapse and uncontrolled proliferation. The ExPeCT™ assays described here demonstrate excellent sensitivity, specificity, precision, and accuracy, providing a reliable means of longitudinal monitoring for anti-CD19 CAR T-cell expansion and/or persistence in patients receiving most FDA approved CD19 therapies.



Unlike B-cell apheresis the ExPeCT™ assay is a direct measurement of the quantity of circulating CAR T-cells and serves as a quantifiable measure of therapeutic vitality.

With laboratory results available within 24 hours after the sample is received, physicians are able to take more directed measures to protect against relapse or refractoriness. Since this is a non-invasive sample collection, longitudinal monitoring of the CAR T-cells are simpler and less traumatizing to the patient.

“ CAR T-cell therapy is a personalized and targeted treatment utilizing specially altered patient T-cells to fight cancer – a “living drug.” ”

Michelle Altrich, PhD, HCLD (ABB)
President, Eurofins Viracor, Lenexa, KS

FDA-Approved CAR T-Cell Therapies

Generic Name	Test Code	Brand Name	Target Antigen	Targeted Disease	Patient Population
Lisocabtagene maraleucel (liso-cel)	33597	Breyanzi®	CD19	Large B-cell lymphomas (DLBCL, HGBL, PMBCL, FL grade 3B) Chronic lymphocytic leukemia (CLL)/SLL (recent expansion)	Adult r/r LBCL (including earlier lines in some settings); Adult r/r CLL/SLL after prior therapies
Tisagenlecleucel (tisa-cel)	33615	Kymriah®	CD19	B-cell acute lymphoblastic leukemia (ALL) B-cell non-Hodgkin lymphoma (NHL)	Children and young adults with refractory or relapsed B-cell ALL Adults with relapsed or refractory B-cell NHL
Axicabtagene (axi-cel)	33613	Yescarta®	CD19	B-cell non-Hodgkin lymphoma (NHL) Follicular lymphoma	Adults with relapsed or refractory B-cell NHL Adults with relapsed or refractory follicular lymphoma
Brexucabtagene autoleucel (brexu-cel)	33614	Tecartus®	CD19	Mantle cell lymphoma (MCL) B-cell acute lymphoblastic leukemia (ALL)	Adults with relapsed or refractory MCL Adults with relapsed or refractory B-cell ALL
Obecabtagene autoleucel (obe-cel)	33566	Aucatzyl®	CD19	B-cell precursor acute lymphoblastic leukemia (ALL)	Adult patients with relapsed/refractory (r/r) B-cell precursor ALL

Specimen Requirements:

- Collect in EDTA tube, do not centrifuge.
- Can be shipped at ambient or frozen temperature. Mon.- Fri.
- Specimens shipped at ambient temperature must be received within 96 hours of collection.
- Volume: 2 mL (min. 0.5 mL)

TAT: 24hrs after receipt of specimen

Testing Platform: Quantitative PCR

Values Reported As: CAR vector copies/µg (calculated field) and CAR vector copies/mL

liso-cel Assay Range:

CAR vector copies/µg is 2.406 copies/µg to 1.203E+07 copies/µg
CAR vector copies/mL is 125.0 copies/mL to 6.250E+08 copies/mL

tisa-cel, axi-cel, brexu-cel Assay Range:

CAR vector copies/µg is 3.767 copies/µg to 1.883E+07 copies/µg
CAR vector copies/mL is 125.0 copies/mL to 6.250E+08 copies/mL

obe-cel Assay Range:

CAR vector copies/µg is 2.997 copies/µg to 1.828E+07 copies/µg
CAR vector copies/mL is 125.0 copies/mL to 6.250E+08 copies/mL

Get Fast Accurate Results

Find out more at euofins-viracor.com
or contact us at info@euofins-viracor.com
or call **800-305-5198**



To learn more about CAR T ExPeCT scan the QR code.

About Viracor

With over 40 years of diagnostic expertise in infectious disease, immunology and allergy testing for immunocompromised and critical patients, Eurofins Viracor is passionate about delivering accurate, timely and actionable results, never losing sight of the connection between the testing it performs and the patients it serves.

Viracor is a subsidiary of Eurofins Scientific (EUFI.PA), a global leader in bio-analytical testing, and one of the world leaders in genomic services. For more information, please visit euofins.com and euofins-viracor.com

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