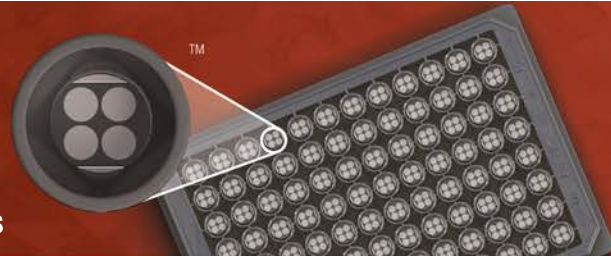


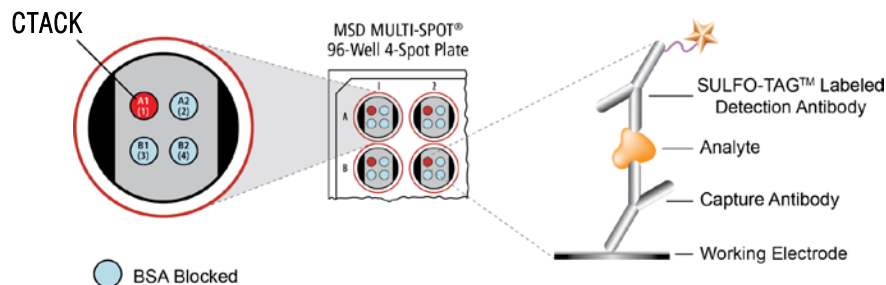
MSD[®] Human CTACK Kit

For quantitative determination in human serum, plasma, and tissue culture supernatants



Alzheimer's Disease
BioProcess
Cardiac
Cell Signaling
Clinical Immunology
Cytokines
Growth Factors
Hypoxia
Immunogenicity
Inflammation
Metabolic
Oncology
Toxicology
Vascular

Catalog Numbers



Cutaneous T-cell attracting chemokine (CTACK/CCL27) is a small, 13 kDa, chemotactic cytokine belonging to the CC family of chemokines which has well-appreciated roles in adhesion and directional homing of immune and inflammatory cells.¹ It is pivotal in mediating the migration of lymphocytes into the skin, by binding to the chemokine receptor CCR10. CTACK is predominantly and continuously expressed in the skin by keratinocytes and is highly upregulated in wounds and inflammatory diseases like atopic dermatitis, and psoriasis.²⁻³ In humans, CTACK also works in concert with TARC (CCL17) to selectively attract cutaneous lymphocyte-associated antigen (CLA)⁺ memory T-cells by interacting with CCR10 expressed on these lymphocytes.²⁻³ Thus, CTACK-CCR10 interaction directly regulates T-cell recruitment to inflamed skin and is the likely key regulator of basal T-cell trafficking during immunosurveillance.

The MSD Human CTACK assay is available on 96-well 4-spot plates. This datasheet outlines the performance of the assay.

Assay Sensitivity

	CTACK
LLOD (pg/mL)	2.8

The lower limit of detection (LLOD) is a calculated concentration based on a .signal 2.5 standard deviations above the blank (zero) calibrator.

Ordering information

MSD Customer Service
Phone: 1-301-947-2085
Fax: 1-301-990-2776
Email: CustomerService@mesoscale.com

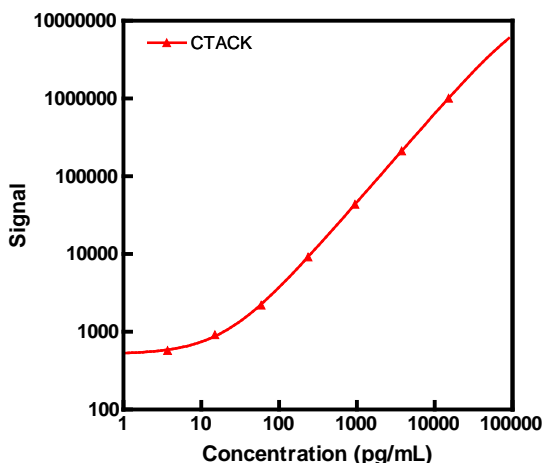
Company Address

MESO SCALE DISCOVERY[®]
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Meso Scale Diagnostics, LLC.
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Gaithersburg, MD 20877 USA
www.mesoscale.com[®]

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procedures.

Typical Standard Curve

The following standard curve is an example of the wide dynamic range of the Human CTACK assay.



Conc. (pg/mL)	CTACK	
	Average Signal	%CV
0	350	7.3
3.7	576	21.3
15	916	2.5
59	2203	11.2
236	9197	11.3
945	43 560	12.6
3780	212 222	17.2
15 118	1 008 267	4.6

MSD Cytokine Assays

MSD Advantage

- **Multiplexing:** Multiple analytes can be measured in one well without compromising speed or performance
- **Large dynamic range:** Linear range of up to five logs enables the measurement of native levels of biomarkers in normal and diseased samples without multiple dilutions
- **Minimal background:** The stimulation mechanism (electricity) is decoupled from the signal (light)
- **Simple protocols:** Only labels near the electrode surface are detected, enabling no-wash assays
- **Flexibility:** Labels are stable, non-radioactive, and conveniently conjugated to biological molecules
- **High sensitivity and precision:** Multiple excitation cycles of each label enhance light levels and improve sensitivity

For a complete list of products, please visit our website at www.mesoscale.com.

References

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2. Reiss Y, Proudfoot A E, Power C A, Campbell J J, Butcher E C. CC chemokine receptor (CCR)4 and the CCR10 ligand cutaneous T cell- attracting chemokine (CTACK) in lymphocyte trafficking to inflamed skin. *J Exp Med* 2001 194:1541-7.
3. Homey B, Wang W, Soto H, Buchanan ME, Wiesenborn A, Catron D, Muller A, McClanahan TK, Dieu-Nosjean MC, Orozco R, Ruzicka T, Lehmann P, Oldham E, Zlotnik A. The orphan chemokine receptor G protein-coupled receptor-2 (GPR-2, CCR10) binds the skin-associated chemokine CCL27 (CTACK/ALP/ILC). *J Immunol*. 2000 164:3465-70.

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