Product number
#10680

CII peptide ($CII_{259-273}$) – 100µg

- A Peptide for studies on T-Cell Responses Associated with Autoimmune Arthritis

Description
The CII peptide (CII259-273) contains the 259 to 273 sequence of rat CII. It is the non-galactosylated peptide that is ideal to serve as the control peptide for the Galactosylated CII peptide (CII259-273-GalHyl264; product numbers #10510 and #10550).
The Galactosylated CII peptide ($CII_{259-273}$-$GalHyl_{264}$; #10510 and #10550) is the dominant T-cell epitope in collagen induced arthritis (CIA) in mice[1]. The Galactosylated CII peptide ($CII_{259-273}$-$GalHyl_{264}$) activates autoimmune T-cells when presented by the MHC II Aq protein[2]. **The CII peptide** (#10680) **may be used as a control peptide** for the in vitro stimulus by the Galactosylated CII peptide (CII259-273-GalHyl264) in antigen-specific T-cell recall assays for quantitation of T cell activity [1,2,3,4,5] as determined by the selected readout by ELISA, ELISpot, flow cytometry or RNAseq, e.g.

Sequence
H2N-Gly-Ile-Ala-Gly-Phe-Lys-Gly-Glu-Gln-Gly-Pro-Lys-Gly-Glu-Thr-COOH

Peptide backbone sequence origin
Collagen alpha-1(II) chain, COL2A1, type II collagen, CII; UniProt: P05539.

Size
100 µg; 20µl; (available also as 10µg)

Supplied in
0.1M acetic acid

Molecular weight
1475.62 g/mol

Storage

It is recommended to store the peptide in aliquots at -20°C, or preferably at -80°C, unless stability data would suggest otherwise. If the peptide is stored less than 48 hours before use, the peptide may be stored at 5°C (or room temperature). Avoid repeated thawing and freezing procedures.

Recommended dilution
It is recommended that the user determines the optimal dilution for their application. For in vitro T cell stimulation, a concentration of 10 µg/ml[5] and a concentration of 20 µg/ml for IL-17 ELISpot assays[4] has been used.

For Research Use Only. Not for use in diagnostic procedures.
Not for resale without express authorization.

References

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5. Merky P, Batsalova T, Bockermann R, Dzhambazov B, Sehnert B, Burkhardt H, Bäcklund J. Visualization and phenotyping of proinflammatory antigen-specific T cells during collagen-induced arthritis in a mouse with a fixed collagen type II-specific transgenic T-cell receptor β-chain. Arthritis Res Ther. 2010;12(4):R155. PMID: 20682070

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