

#### **IV. Multiplex measurement of cytokine/chemokine concentrations**

Quantification of cytokines, chemokines, hormones is often not possible from a limited amount of biological samples (CSF, newborn blood, tears).

##### **Our approach:**

Our group is unique in Eastern Hungary in having the Luminex MAGPIX technology, which allows multiplex quantification of 50 proteins (cytokines, chemokines, hormones) in one reaction from 20 microliters of biological samples. With one reagent set, the concentration of 50 proteins to be measured can be determined from 80 biological samples in 96-well plates, generating 4000 data points (pg/ml).

A similar technique, Legendplex, is also available from our group, where 13 proteins can be quantified in one reaction well of a 96-well microtitre plate by flow cytometry.

##### **Target group:**

Pharmaceutical companies, biotech companies, university or HUN-REN research groups

##### **Our related publications:**

<https://link.springer.com/article/10.1186/s13293-022-00414-6>

<https://www.mdpi.com/1422-0067/22/8/4198>

<https://www.hindawi.com/journals/mi/2021/5523582/>

<https://www.nature.com/articles/s41366-024-01584-6>