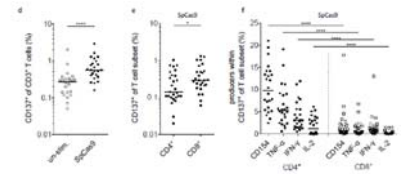


Technology Offer

CRISPR Associated Protein Reactive T Cell Immunity



Ref. No.: CH885

Background

Experiments using PBMS of healthy adults show a high prevalence of *Streptococcus pyogenes* Cas9 reactive T cells, indicating a high likelihood for interference in patients treated using a CRISPR CAS9-based method.

Technology

The invention is based on FACS analysis results of primary blood cells (PBMS) derived from healthy adults that had been stimulated prior to analysis.

The invention holds options for the treatment of patients that eliminate the immunological interference of the T-cell based response of patients.

Benefits

- ✓ Diagnosis of patients prior to CRISPR Cas9- based treatment using established methods
- ✓ Option for therapeutic intervention in patients showing reactive T-cell Immunity against *Streptococcus pyogenes* Cas9.

Application

Diagnosis and Treatment of patients subject to CRISPR Cas 9-based Treatment

Commercial Opportunity

Searching for a licensing or developing partner

Fig. 1: Ubiquitous peripheral SpCas9-specific T cell response within human donors a) SpCas9-induced activation of CD8+ cells defined by CD137 expression versus unstimulated controls (n=48 each) b) background-normalized CD137 expression in response to SpCas9 whole protein c) SpCas9 –induced expression of CD154, TNF-α, IFN-γ and IL-2 within activated CD4+CD137+ and CD8+CD137+ T cells (n=48 healthy donors)

Key words

CRISPR Cas9, putative SpCas9-directed T cell response,

Developmental Status

Data *in vitro*

IP Status

EP patent application (03/2018)
PCT patent application (03/2019)

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Patent Owner

Charité – Universitätsmedizin Berlin

Contact

Dr. Sigrun Szepanski
Technology Manager

Tel.: +49 30 450 570 825

Fax: +49 30 450 7570 964

Sigrun.Szepanski@bihealth.de

<http://technologietransfer.charite.de>

<http://www.berlinhealthinnovations.com>