Supplement Table 3. Examples of vaccine candidates against allergies, autoimmune and other diseases based on plant virus carriers.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Vaccine candidate** | **Antigen** | **Plant virus / VLP** | **Expression system** | **Immunological data** | **Reference** |

Alzheimer’s disease amyloid β N-terminal peptides (AA 1-15) CMV Plant Polyclonal antibodies against Aβ [1]

recognize VLPs

amyloid β N-terminal peptide (AA 1-6) CMV *E. coli* Antibodies from immunized mice [2]

recognize human Alzheimer plaques

Atopic dermatitis Canine IL31 CMV *E.coli* Vaccinated dogs demonstrate reduced [3]

symptoms of atopic dermatitis

Cat allergy Major cat allergen Fel\_d\_1 CMV *E.coli* Immunized mice are protected against [2]

systemic anaphylactic reactions

Major cat allergen Fel\_d\_1 CMV *E.coli* Vaccinated cats have decreased level [4]

of endogenous Fel\_d\_1; reduced risk of

allergic symptoms for cat owners

Insect bite Horse IL5 CMV *E.coli* Vaccinated horses demonstrate [5,6]

hypersensitivity reduced symptoms of insect bite

hypersensitivity

Horse IL31 CMV *E.coli* Vaccinated horses demonstrate reduced [7]

symptoms of insect bite

hypersensitivity

Pain Mice NGF CMV *E.coli* (VLPs) Reduction of spontaneous pain behaviour [8]

Mammalian in vaccinated mice with surgically induced

(NGF)osteoartritis

Peanut allergy allergen Ara\_h\_202 CMV *E.coli* Vaccinated mice protected against [9]

systemic anaphylactic reactions

Psoriasis Mice IL17A CMV *E.coli* Immunized mice demonstrate the [2]

reduction of psoriatic symptoms

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