

Hooke Kits™ for EAE induction in C57BL/6 mice

Also for EAE induction in (C57BL/6 x SJL)F1 mice

[Protocol](#) | [Contents](#) | [Typical Results](#) | [Storage](#) | [References](#) | [MSDS](#) | [Related Products](#)

Emulsion supplied in pre-filled syringes, ready to use.

- **Consistently induces EAE in female C57BL/6 mice**

EAE will develop in 90-100% of mice within 9 to 14 days. Mean maximum score will be 3.0 to 3.5. Each lot is tested and individually adjusted to ensure consistent disease induction.

On Day 0, MOG₃₅₋₅₅/CFA or MOG₁₋₁₂₅/CFA emulsion and pertussis toxin are injected.

On Day 1, a second dose of pertussis toxin is injected.

- **Eliminates tedious preparation of emulsions**

Properly prepared emulsions are critical for reliable induction of many autoimmune disease models. Our emulsions are carefully made and pre-filled into syringes, ready to use, to reduce time needed to set up experiments.

- **Saves time and mice in testing individual reagents**

Lot-to-lot reagent variations can cause dramatic changes in severity of induced autoimmune disease. The consistent potency of pre-characterized Hooke Kits™ eliminates time-consuming testing.

- **Reduces your mouse facility's exposure to pathogen contamination**

Pre-filled syringes are prepared under aseptic conditions and delivered in sterilized plastic bags for easy disinfection before introduction into your mouse facility.

Experimental autoimmune encephalomyelitis (EAE) is the model most commonly used to study efficacy of potential drugs for treatment of multiple sclerosis (MS).

Because of its many similarities to MS, EAE is used to study pathogenesis of autoimmunity, CNS inflammation, demyelination, cell trafficking and tolerance induction.

EAE is characterized by paralysis (in some models the paralysis is remitting-relapsing), CNS inflammation and demyelination. EAE is mediated by myelin-specific CD4+ T cells, but CD8+ cells and B cells may also play a role in some models of EAE.

MOG₃₅₋₅₅ antigen is recommended for study of onset and development of EAE; MOG₁₋₁₂₅ is recommended for testing therapeutics which specifically target B-cells [1, 2, 3]. For more information on model and antigen selection, please see our [Learning Center](#).

Cat #	Hooke Kit™	Strain	Age	Description	Size	Price (first kit)	Price (each add'l kit)
EK-2110	MOG ₃₅₋₅₅ /CFA Emulsion PTX	C57BL/6	10+ weeks	Emulsion in pre-filled syringes, PTX	10 mice	\$ 312	\$ 266
EK-2160	MOG ₁₋₁₂₅ /CFA Emulsion PTX	C57BL/6	10+ weeks	Emulsion in pre-filled syringes, PTX	10 mice	\$ 1636	\$ 1309

These kits can be customized for a small additional charge. Contact us at info@hookelabs.com or +1 617 475 5114 with your requirements.

With a given Hooke Kit™, older mice generally develop more severe disease and more uniform disease onset.

Protocol

[EAE Induction by Active Immunization in C57BL/6 Mice](#)

Note: These kits may also be used to induce EAE in (C57BL/6 x SJL)F1 mice.

Detailed contents

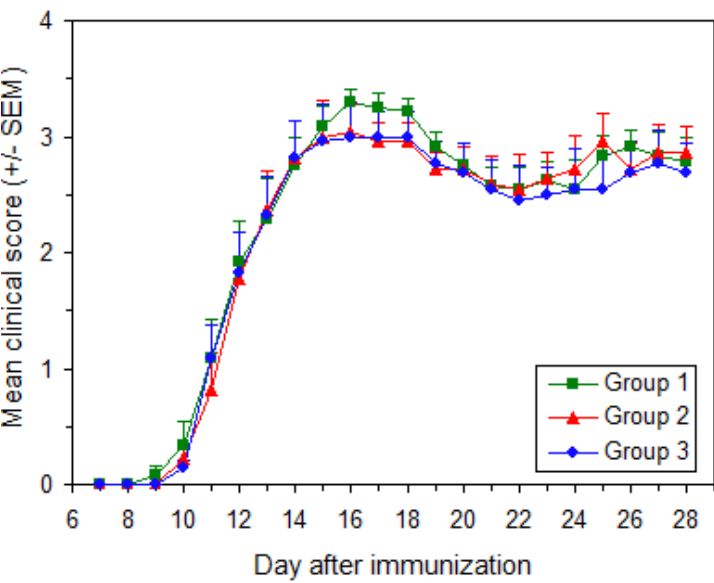
Each kit provides sufficient reagents for 10 mice.

EK-2110 antigen is myelin oligodendrocyte glycoprotein 35-55 (MOG₃₅₋₅₅) rat, mouse, sequence MEVGWYRSPFSRVVHLYRNGK.

EK-2160 antigen is human recombinant myelin oligodendrocyte glycoprotein 1-125 (MOG₁₋₁₂₅), sequence MGQFRVIGPRHP_{IRALVGD}EVELPCRISPGKNATGMEVGWYRPPFSRVVHLYRNGKDQDGDQAP_{EYRGRT}ELLKDAIGEGKVTLRIRNVRFSD_{EGGFTCF}FRDHSYQEEAAM ELKVEDPFYWVSPGHHHHHH.

Qty	Description
2	1 mL syringes, pre-filled with antigen/CFA emulsion ~ 1 mg MOG ₃₅₋₅₅ /mL emulsion (EK-2110) ~ 0.5 mg MOG ₁₋₁₂₅ /mL emulsion (EK-2160) ~ 2-5 mg killed mycobacterium tuberculosis H37Ra/mL emulsion (all concentrations adjusted by lot for consistent EAE induction)
1	Vial containing 5 µg lyophilized pertussis toxin (PTX)
1	Data sheet: Recommended experimental protocol, typical results

Typical results



EAE induction in C57BL/6 mice

Protocol: [EAE Induction by Active Immunization in C57BL/6 Mice](#)

Data are from three independent groups in a single experiment. Immunization used Hooke Kit™ MOG₃₅₋₅₅/CFA Emulsion PTX (EK-2110), with 11-13 week old female C57BL/6 mice (Taconic Farms).

Pertussis toxin from 3 vials was pooled before administration.

Similar results are obtained using C57BL/6 mice from The Jackson Laboratory and with MOG₁₋₁₂₅/CFA Emulsion PTX (EK-2160) using the recommended protocol.

Group	Mice/group	Age at immunization	Mean maximum score ± SD	Day of onset ± SD	Disease incidence
1	11	11-13 weeks	3.46 ± 0.14	11.3 ± 1.4	100 %
2	11	11-13 weeks	3.36 ± 0.32	11.7 ± 1.8	100 %
3	11	11-13 weeks	3.18 ± 0.56	11.3 ± 1.7	100 %

Storage & stability

Stable at least 20 days when stored at 2–4 °C

References

[1] Lyons JA et al, Eur J Imm 29:3432 (1999)
[2] Svensson L et al, Eur J Imm 32:1939 (2002)
[3] Lyons JA et al, Eur J Imm 32:190 (2002)

Material Safety Data Sheets (MSDS)

EK-2110:
[MOG₃₅₋₅₅/CFA Emulsion \(PDF\)](#) and
[Lyophilized pertussis toxin \(PDF\)](#)

EK-2160:
[MOG₁₋₁₂₅/CFA Emulsion \(PDF\)](#) and

Related products

- [LT-0105](#) Lyophilized pertussis toxin, 5 µg
- [DS-0111](#) MOG₃₅₋₅₅ in TC Media, 100x
- [CK-2110](#) Hooke Control Kit™ for EK-2110 (full size)
- [CK-7110](#) Hooke Control Kit™ for EK-2110 (half size)
- [CK-2160](#) Hooke Control Kit™ for EK-2160 (full size)
- [CK-7160](#) Hooke Control Kit™ for EK-2160 (half size)