

# **Diaclone Mouse Phage Display platform,** an alternative approach to mAb development



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# **I/INTRODUCTION**

Since 1991 -> 6 fusions carried out giving only one specific anti-IL-8 mAb : clone B-K8, used in Diaclone's IL-8 ELISA kit paired with a rabbit polyclonal.

The aim of this project was to replace the polyclonal by a new anti-IL-8 Mab

In 2019 - New mouse immunization to run in parallel classical fusion method and phage display approach. After Fusion -> 490 candidates tested -> 0 positive

### **II/ PHAGE DISPLAY METHOD**





**Biopanning – Selection of high affinity phages** 



#### **Candidates selection by ELISA**

## **III/ RESULTS AND CONCLUSION**

• 7 Fab Candidates selected from 96 screened The best candidate :



- is IL-8 specific (Fig 5)
- paired with the B-K8 (Fig 5) -
- Reformatting in full IgG1 validated in Elisa kit and named B-B49 (Fig 6)

Phage display technology allows mAb development particularly difficult to obtain with a classical fusion

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