

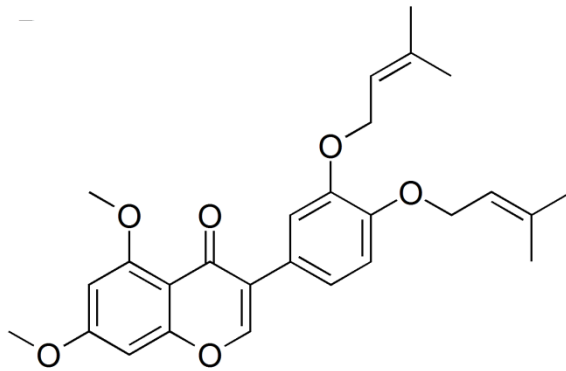
# GlaB: The Reward for Perseverance

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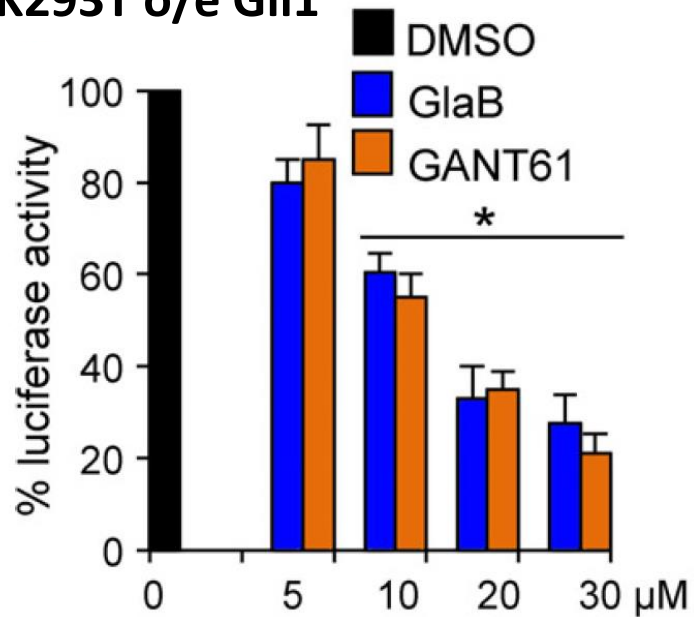


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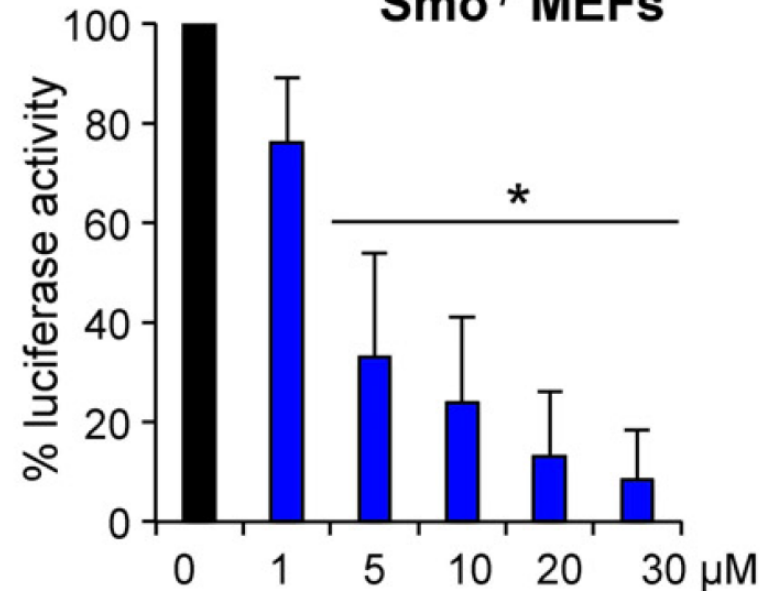
## GlaB *in vitro*

### HEK293T o/e Gli1

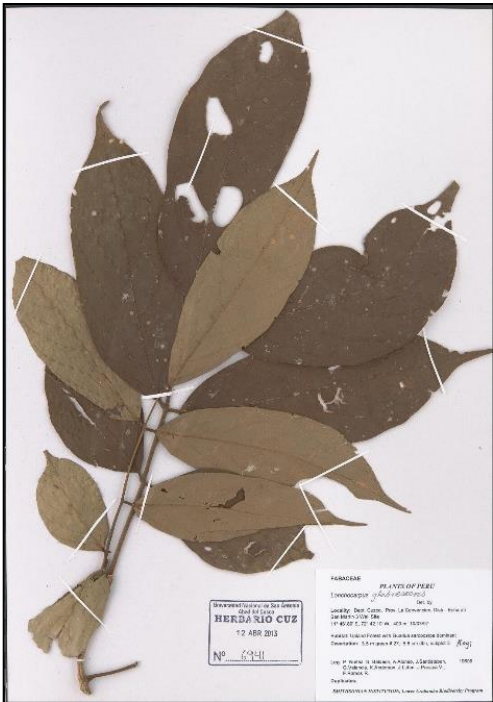


GlaB is a Gli1 antagonist

### Smo<sup>-/-</sup> MEFs

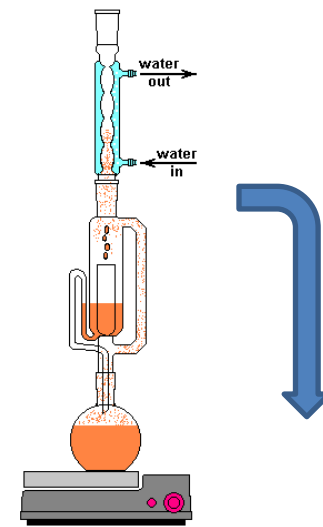


GlaB acts downstream of Smo



***Derris glabrescens***  
(Leguminosae)

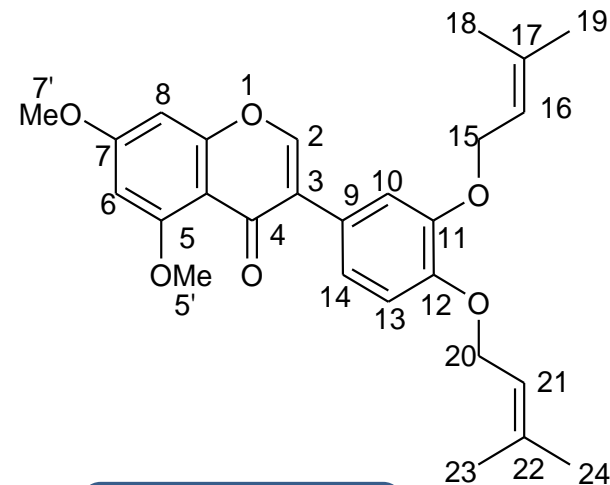
➔ **Seeds extraction**  
soxhlet  
MeOH



**Products isolation**  
silica-gel chromatography  
5% AcOEt/benzene

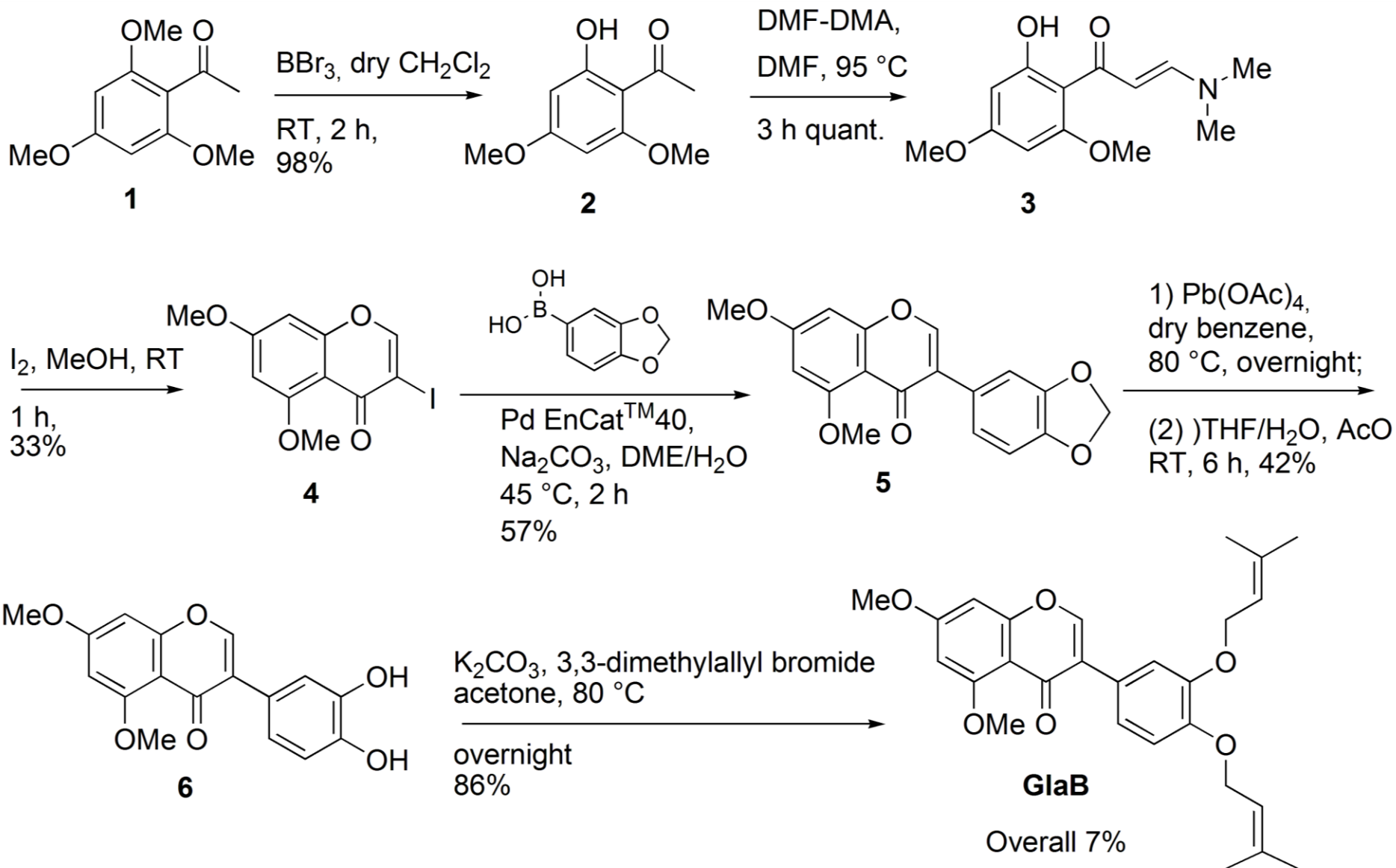


**Total synthesis**  
←



**Glabrescione B**  
0,3%

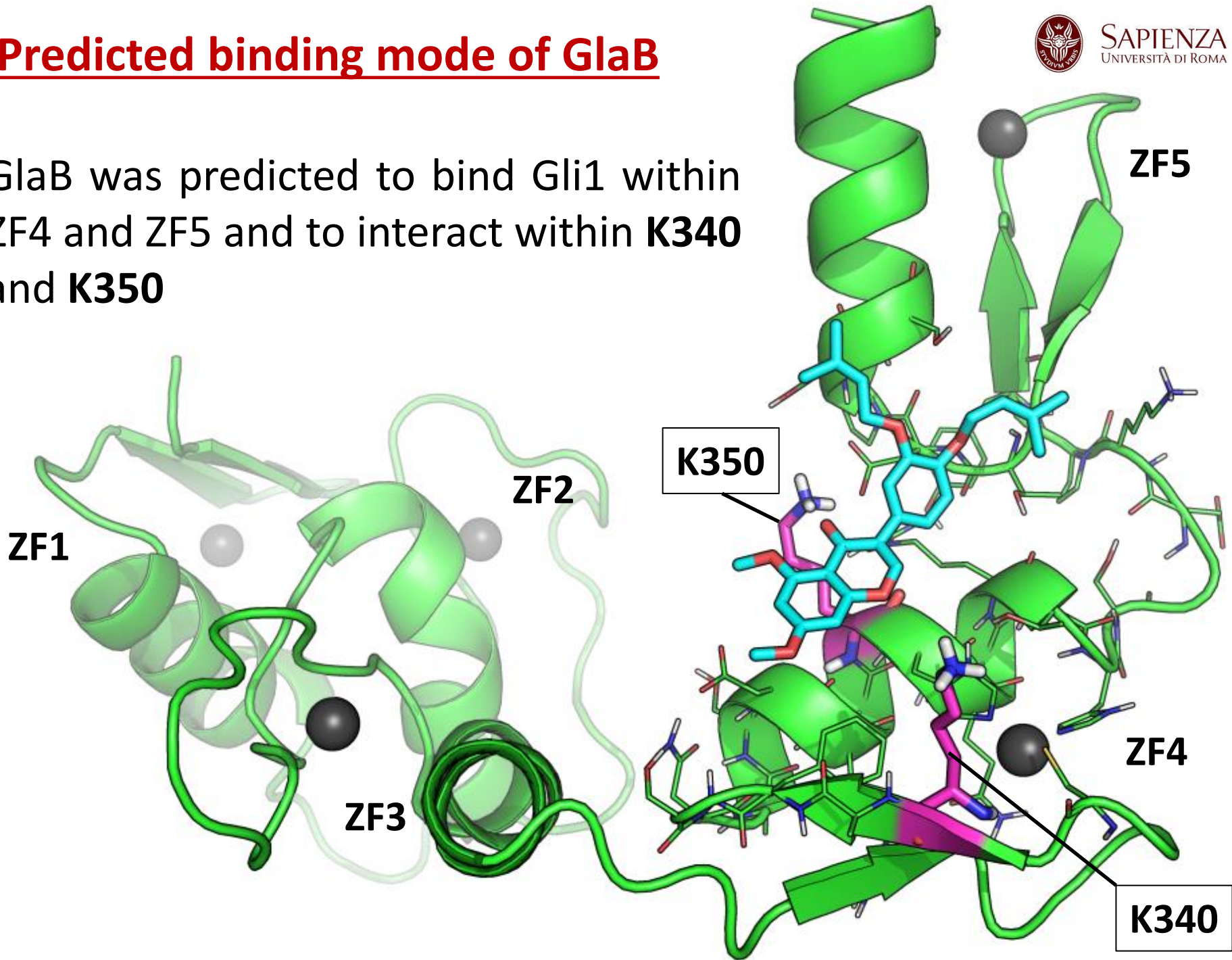
# GlaB total synthesis



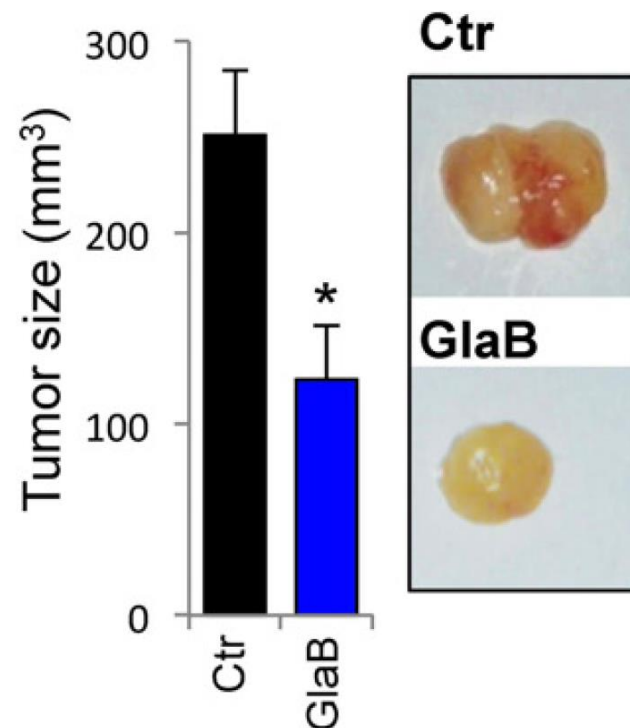
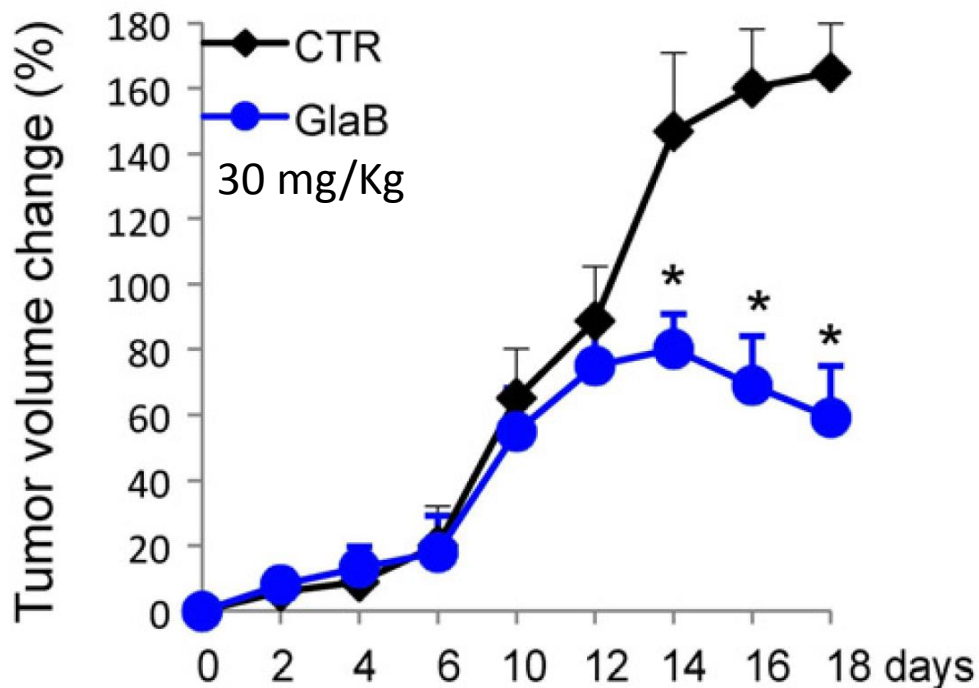
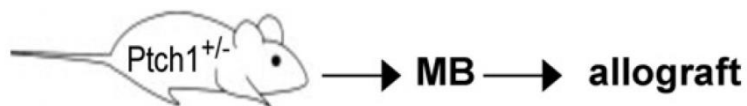
# Predicted binding mode of GlaB



GlaB was predicted to bind Gli1 within ZF4 and ZF5 and to interact within **K340** and **K350**



# GlaB efficacy *in vivo* (Ptch1<sup>+/-</sup> MB allograft)



... MB **orthotopic** xenograft animal model confirmed the efficacy of GlaB *in vivo* (GlaB crosses of mice BBB)

# The multidisciplinary collaborative network



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Markus Kalesse  
Martin Maier  
Mercedes Amat  
Stephen Clark  
Vasile Parvulescu

**Tuberculosis**

Gunter Schneider  
Stephen Fey  
Hernan Terenzi



**Viral infections**

Juana Diez  
Andreas Meyerhans  
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**Cancer**

Sapienza University  
IIT  
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Magdalena Krol

