

**Targeting the interaction between the SH3 domain of Grb2 and Gab2**

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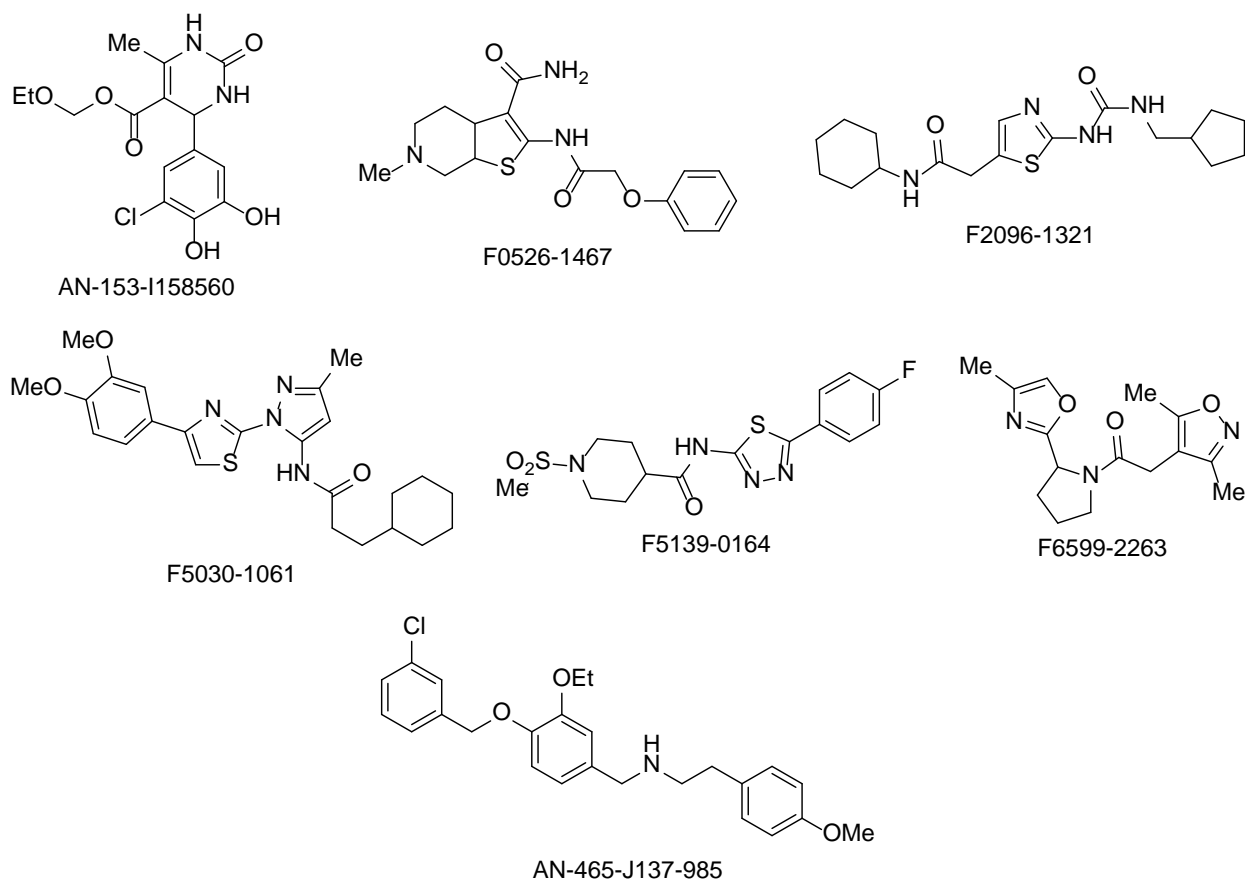
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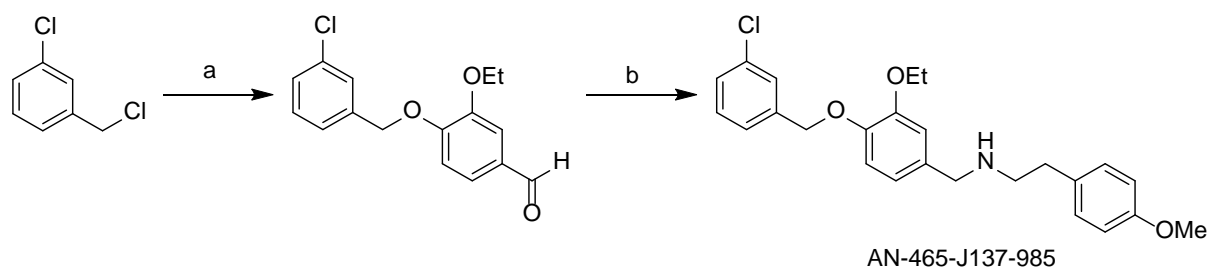
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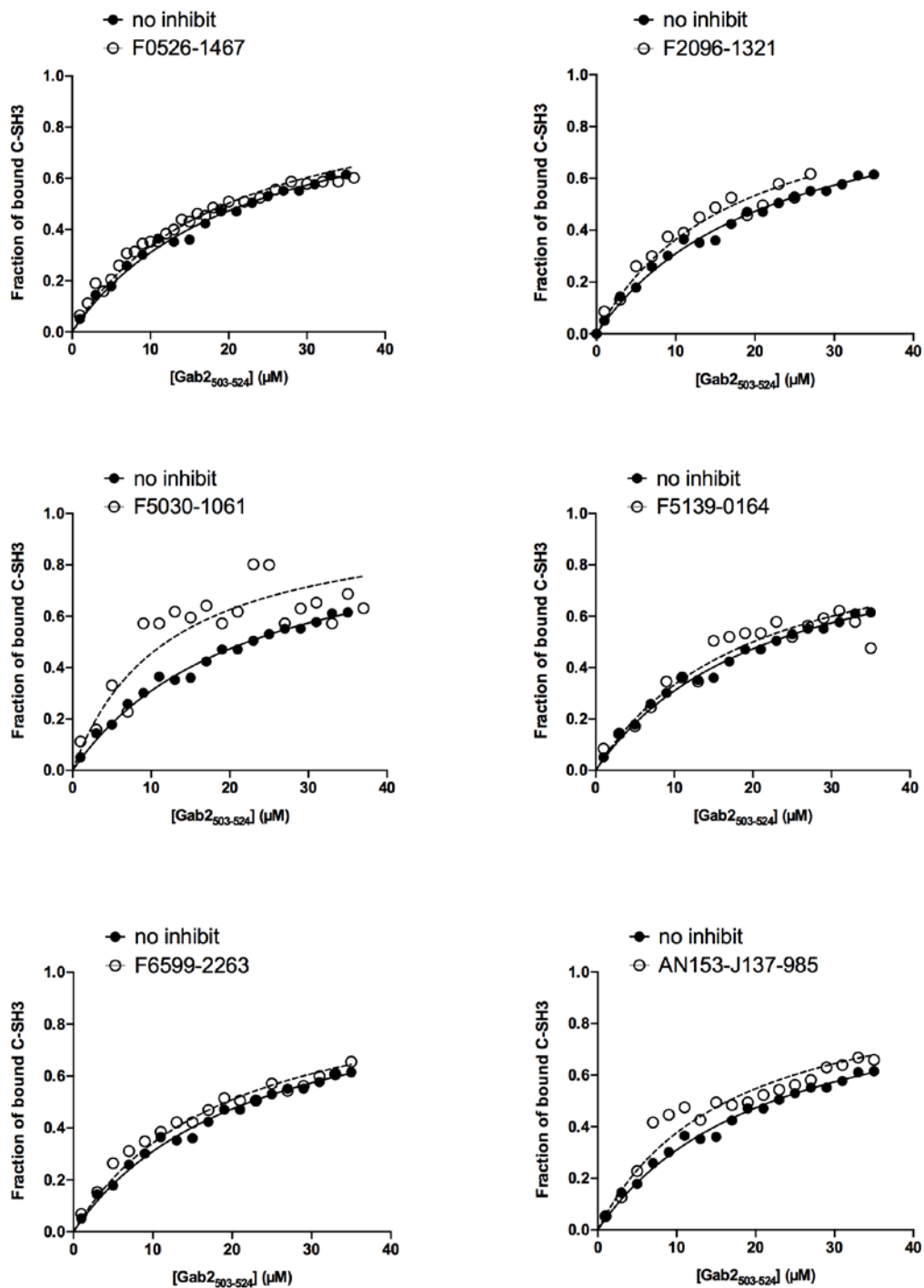
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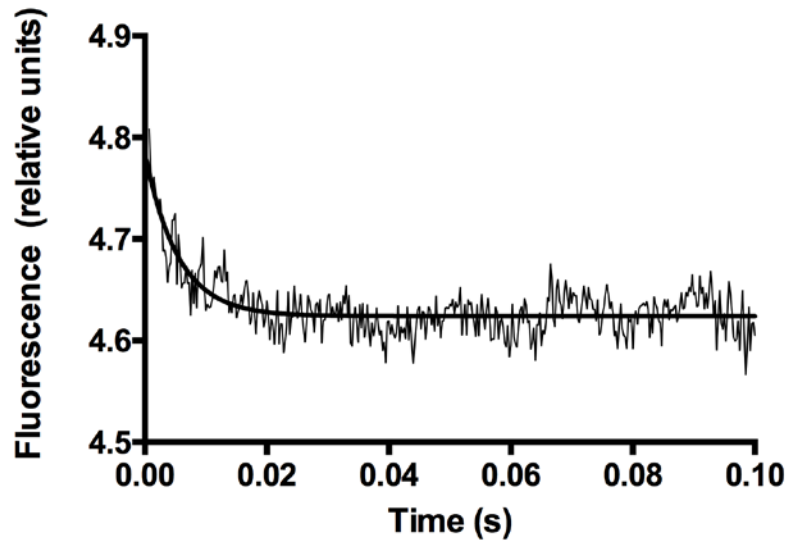
**Figure S1.** Chemical structures of compounds AN-153-I158560, F0526-1467, F2096-1321, F5030-1061, F5139-0164, F6599-2263 and AN-465-J137-985.



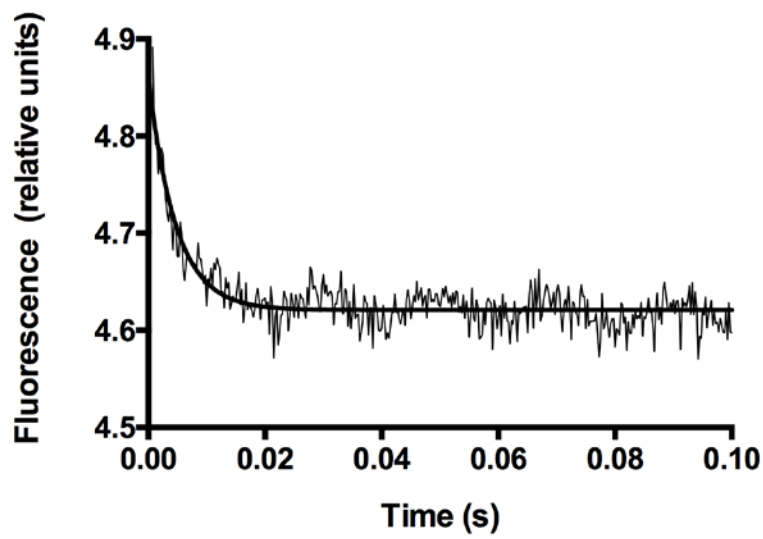
**Scheme S2.** Chemical Synthesis of AN-465-J137-985. Reagents and reaction conditions: (a) 3-ethoxy-4-hydroxybenzaldehyde, cesium carbonate, *N,N*-dimethylformamide, 70 °C, 1 h, argon stream, 97%; (b) (i) 2-(4-methoxyphenyl)ethan-1-amine, methanol, 0 °C, 30 min, then 25 °C, 12 h; (ii) 1N sodium hydroxide aqueous solution, 25 °C, 2 h, 30%.



**Figure S3.** Equilibrium binding titration monitored by change in intrinsic fluorescence emission of C-SH3 at different concentrations of Gab2\* in absence (full circles) and in presence of different inhibitors at a constant concentration of 5 μM.



**AN465-J137-985**



**Figure S4.** Observed displacement time-courses in the absence (top) and in the presence of 5 $\mu$ M AN-465-J137-985 (bottom). The experimental methodology and settings are described in the main text.