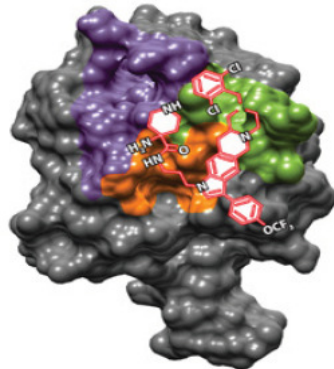


New K-Ras Proteins

Measuring inhibition of SOS1 GEF induced GDP dissociation from K-Ras4B wild type and mutants.



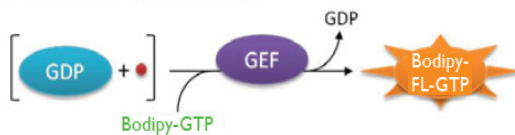
Legend: Welsch et al. 2017 indicate a novel way to improve the binding affinity of small molecule inhibitors of K-Ras. The triple binding site of compound 3144 (red) is shown over the surface of K-Ras. Compound 3144 inhibits GTP exchange with micromolar activity.

- Reliable, pure, biologically active GEF proteins and small G-proteins.
- SOS1, Ras-GRF, Tiam1, Vav1, Vav2, and ARNO available.
- K-Ras4B mutant proteins; G12V, G12D, G13D, G13S, Q61P, K128A, R135A, plus compound binding site mutants G12D+D38A and G12D +I36N, see page 19 for more information.
- Custom compound screening with K-Ras wild type and mutated isoforms with or without exchange factors, see page 19.

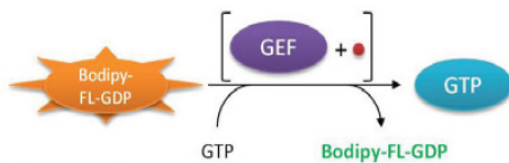
See p. 10,11 & 19 for more information

Examples of GTPase Exchange Factor assays

1. In vitro GTP association



2. In vitro GDP dissociation



3. Tissue culture

Choose GEF or GAP DNA
 ↓
 Transfect
 ↓
 Culture +/- compound
 ↓
 Extract protein
 ↓
 Measure GTPase activity of specific small G-protein.

Ras Small-G Proteins

K-Ras4B Protein, hu. rec., wild-type (Cat. # RS03)

K-Ras4B Protein, hu. rec., G12V mutant (Cat. # RS04)

K-Ras4B Protein, hu. rec., G13D mutant (Cat. # RS06)

K-Ras4B Protein, hu. rec., G13S mutant (Cat. # RS07)

K-Ras4B Protein, hu. rec., G12D mutant (Cat. # RS13)

K-Ras4B Protein, hu. rec., Q61P mutant (Cat. # RS09)

K-Ras4B Protein, hu. rec., K128A mutant (Cat. # RS08)

K-Ras4B Protein, hu. rec., R135A mutant (Cat. # RS10)

K-Ras4B Protein, hu. rec., G12D+I36N mutant (Cat. # RS11)

K-Ras4B Protein, hu. rec., G12D+D38A mutant (Cat. # RS12)

R-Ras Protein, hu. rec., wild type (Cat. # RS05)

K-Ras4B Protein, hu. rec., other mutants (inquire)

N-Ras Protein, hu. rec., wild-type (Cat. # RS02)

H-Ras Protein, hu. rec., wild-type (Cat. # RS01)