

# Knockdown validation

To validate the knock-down efficiency of reagents designed by NEXT-RNAi, we designed two independent long dsRNAs for all 49 protein- and lipid-phosphatases expressed in *Drosophila* D.Mel-2 cells (GEO accession GSE21283).

Designs were calculated for FlyBase release 5.16 using the following settings:

- Avoid perfect homology equal or higher than 19 nt to any unintended targets
- Avoid CAN repeats or other low-complexity regions
- Avoid targeting of 3'-UTRs
- Avoid significant homology (E-value < 1e-10) of the long dsRNA to any other target
- Optimal efficiency (using the [weighted](#) method)
- Desired long dsRNA length: 150-175 nt

The complete evaluation report (for FlyBase release 5.24) is available [here](#).