

SELEX 'selective evolution of ligands by exponential enrichment'

The process of SELEX involves a **positive selection** step: the **nucleic acid library** is incubated with a **target** (positive selection), which can be preceded by a **counter selection** phase to remove non-specific nucleic acid molecules. During the **partitioning step**, bound and unbound fractions are separated. The bound fraction is **amplified** to obtain an enriched pool for next round of selection. This process is repeated for **n rounds** until the pool is enriched for sequences that specifically bind the target. These nucleic acid molecules are cloned and **sequenced**. Individual sequences are **aptamers**.

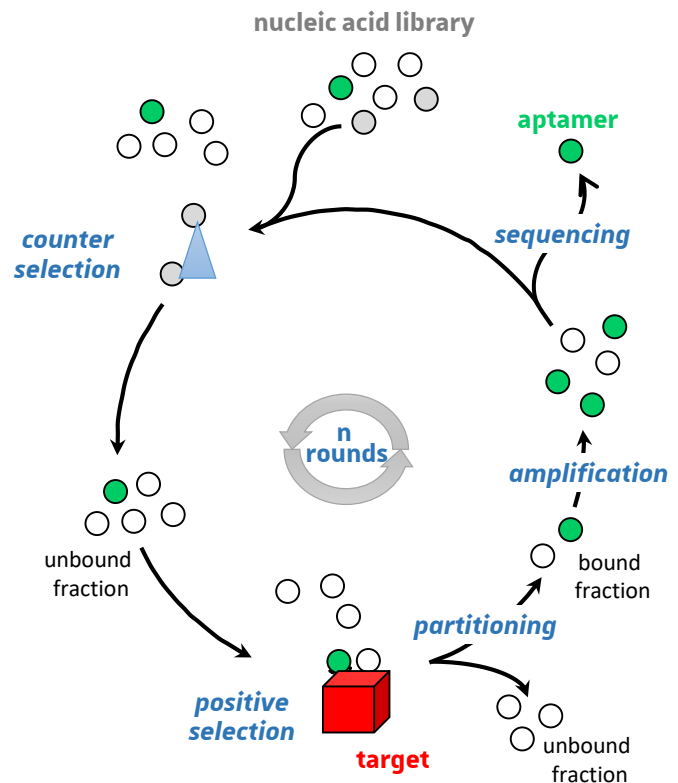


Figure adapted from Mercier M-C, Dontenwill M, Choulier, L. (2017). Selection of nucleic acid aptamers targeting tumor cell-surface protein biomarkers. *Cancers*. 21(9), pii: E69.