

MIRAC™ Proteins

Conditionally Active Biologics

BioAtla's revolutionary platform for evolving conditionally active proteins optimizes proteins (including antibodies) to be activated and/or inactivated at defined physiological conditions.

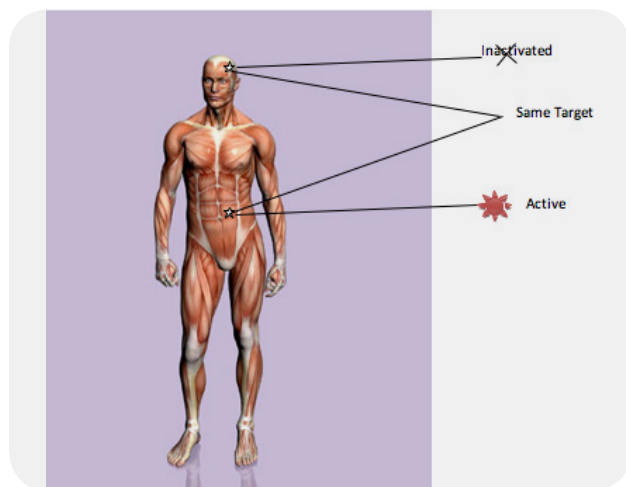
A sampling of physiological conditions that are evolution candidates:

- Temperature
- pH
- osmotic pressure
- osmolality
- electrolyte or ion concentration (e.g. sodium, potassium, calcium, iron, etc)
- hydrophobicity
- oxidation
- other physiological microenvironment conditions

FEATURES

- Proteins are evolved to be conditionally active in accordance with customer defined criteria. Generate super smart drugs that only work where you want them to work! A new wave of protein therapeutics and biobetters.
- Minimal changes with maximum benefit to achieve desired criteria can be identified and pursued.
- Increase safety by reducing "on-target toxicity"; drugs correctly binding targets in an undesired part of the body, resulting in undesirable toxicity. Conditionally activated proteins can be engineered to function only in the correct, desired location in the body, minimizing such risks.

RESULTS / DATA



BENEFITS

Conditional activation or deactivation possible (simultaneous evolution of characteristics possible, such as chemical or proteolytic resistance)

Reduce or eliminate on-target toxicity (in areas of the body where drug action is undesirable)

Allows rapid action drugs (reversible, irreversible inactivation of drugs)

Yields safe drugs

Develop non-immunogenic drugs

Potential applications include anti-tumor action, blood vessel treatments, eye treatments, skin treatments, cosmetic treatments, enhanced drug delivery, safer immune modulation, anti-infectives

Enables transient high protein dosing (antibody, ligand or enzyme); dose can determine duration (i.e. faster than blood clearance)

Strong intellectual property generated covering novel proteins

Freedom to operate

Enables a new generation of Biobetters

