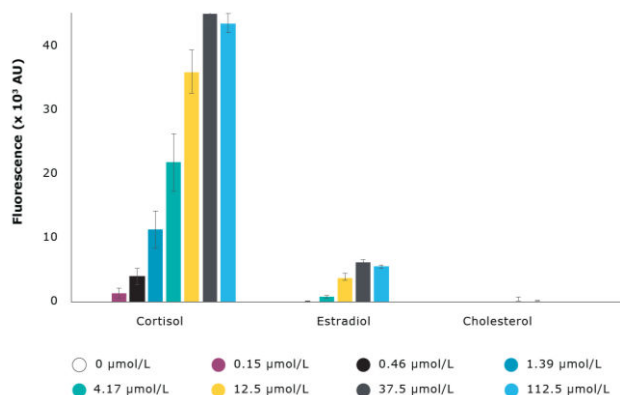


Optimer[®] binder for cortisol

Validated Optimer[®] binders for the detection & quantification of cortisol hormone

Target	Cortisol
Selectivity	Does not interact with serum or cholesterol. Cross-reactive with estradiol.
Applications	Biolayer interferometry ELISA-like assays
Optimer [®] size	57 nucleotides

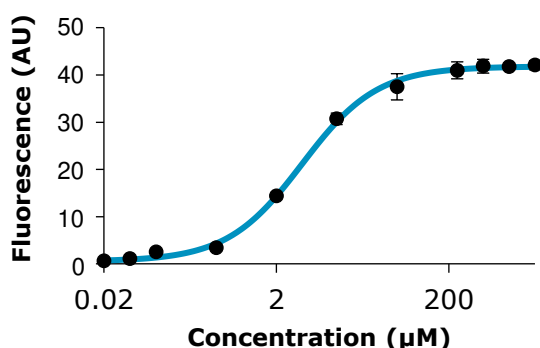


Selective Optimer[®] binders detect cortisol with minimal cross-reactivity to alternative steroid hormones in an Optimer[®]-specific assay platform.

Target information

Cortisol is a steroid hormone, in the glucocorticoid class of hormones. It is produced in many animals, mainly by the zona fasciculata of the adrenal cortex in the adrenal gland. It is produced in other tissues in lower quantities. It is released with a diurnal cycle and its release is increased in response to stress and low blood-glucose concentration. It functions to increase blood sugar through gluconeogenesis, to suppress the immune system, and to aid in the metabolism of fat, protein, and carbohydrates. It also decreases bone formation.

Cortisol Optimer[®] shows quantifiable range covering clinical concentration



Cortisol quantifiable range

LLOQ 0.04 \pm 0.005 μM

ULOQ 225 \pm 54 μM

Optimer[®] binders show broad dynamic range for cortisol by ELISA-like assay, to enable sensitive, reliable hormone detection and monitoring.

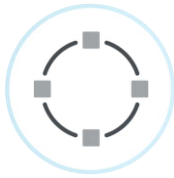
Optimer® binders

Optimer® binders are small oligonucleotide ligands (~15kDa) that bind to target molecules with comparable specificity and affinity to that of antibodies. These synthetic affinity ligands are designed to mimic the molecular recognition characteristics of monoclonal antibodies in different applications.

Intended for research use only. Not to be used for any other purpose, which includes but is not limited to, unauthorized commercial uses, *in vitro* diagnostic uses, *ex vivo* or *in vivo* therapeutic uses or any type of consumption or application to humans or animals.

The Optimer® advantage

Optimer® binders are oligonucleotide affinity ligands that offer several key benefits over traditional protein-based affinity reagents.



Batch consistent
manufacture



Rapid discovery
& development



Animal-free discovery,
development & manufacture



Highly stable with
long shelf life



Security of supply
from defined
Optimer® sequence



Small size for improved
signal:noise & tissue
penetration

Flexible functionalisation for assay compatibility

Optimer® binders can be modified with a wide variety of functional groups for simple platform integration. Please enquire for more information.

For custom modifications specific for your research, or more details about how Optimer® binders can be utilized in your research, please get in touch via email at info@aptamergroup.com.

