

DEV9922 Corticosterone rat/mouse ELISA

The Corticosterone rat/mouse ELISA is a competitive immunoassay for the quantitative measurement of corticosterone in rat or mouse serum and plasma.

Technology	: ELISA
Kit size	: 96
Sample material	: rat/mouse serum or plasma
Sample preparation	: -
Sample volume	: 10 μ l
Standard range	: 15-2250ng/ml
Incubation	: 2h, 30min at RT
Measuring system	: TMB at 450nm
Sensitivity	: 4.1ng/ml

Special remarks:

Introduction

Physiology

Corticosterone is the principle glucocorticoid secreted by the adrenal cortices of mice and rats. Secretion of corticosterone in these species is modulated by a complex negative feedback mechanism involving the central nervous system, hypothalamus, pituitary, and adrenals. ACTH released from the pituitary augments adrenal secretion of corticosterone while falling levels of corticosterone are associated with rising levels of ACTH. In both mice and rats there is a circadian rhythm of corticosterone release with the highest concentrations being observed between 1600 and 2200 hours in a normal laboratory environment.

Laboratory Applications

Corticosterone measurements are a useful index of general and neuroendocrine response to the stress of laboratory experiments in mice and rats. Thus corticosterone concentrations rise sharply in healthy, intact animals following exposure to experimental stimuli such as drugs, barometric shock, experimental disease state, or abrupt temperature shifts, and may serve to document the neuroendocrine and endocrine integrity of the preparation while observations are being made.

PLEASE NOTE: According to the respective ELISA a **Rat control-kit (Cat.-No. DEV99RC)** is available and can be used for internal quality control.

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