

2023-04-28

Anti-h ACTH R12801 SPTN-5

Product overview

Catalog number 140028

Specificity Antibody recognizes human adrenocorticotropic hormone

Description Recombinant mouse IgG₁ antibody, cultured *in vitro* under conditions free

from animal-derived components.

Product buffer solution 50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN₃ as a preservative

Shelf life and storage Unspecified, storage at 2–8 °C

 $\begin{tabular}{l} Subclass & IgG_1 \end{tabular}$

Analyte description Adrenocorticotropic hormone (ACTH), also known as corticotropin, is a

peptide hormone produced by the pituitary gland in response to stress. ACTH stimulates the adrenal cortex and the secretion of glucocorticoids such as cortisol. ACTH is often measured along with cortisol to diagnose disorders of the pituitary or adrenal glands such as Cushing's syndrome or

Addison's disease.

Parameters tested on each lot

Product appearance Liquid, may turn slightly opaque during storage

Product concentration 5.0 mg/ml (+/-10 %) (A280 nm, 1 mg/ml, 1 cm = 1.6)

Immunoreactivity 80–120 % compared to the reference sample in an FIA test

IEF Profile 5.5–6.0

Purity $\geq 95 \%$

Kinetic parameters

Association rate constant 7.9 x 10⁵ 1/Ms

Dissociation rate constant 1.9 x 10⁻⁵ 1/s

Affinity constant $K_A = 4.3 \times 10^{10} \text{ 1/M}, K_D = 2.3 \times 10^{-11} \text{ M} (0.023 \text{ nM})$

Determination method BLI (Octet RED96e)

Determination antigen Synthetic biot. ACTH (1-39), Discovery peptides (cat. crb1000079h,

lot. 10071/15)





Product specification ANTIBODY

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Cross-reactivities Does not recognize: β-MSH, β-endorphin, ACTH 1-10,

ACTH 1-13 (α-MSH), ACTH 18-39 (CLIP)

Recognizes: ACTH 1-17, ACTH 1-24, ACTH 7-38

Epitope Based on fragment-recognition data, the epitope is located within ACTH

14-18.

Pair recommendations

		DETECTION	
		R12801	R12802
CAPTURE	R12801	-	+
	R12802	+	-

Please note that pair recommendations are based on results obtained by our laboratory. Equally good results may be obtained using other pairs and therefore these recommendations are only indicative.

Platforms tested FIA

Antigens tested N/D

Product stability TEMPERATURE, TIME RESULT

-70 °C, 21 days OK
-20 °C, 21 days OK
+4 °C, 21 days OK
+35 °C, 21 days OK
+45 °C, 7 days OK

Stability testing is performed in the product buffer to see whether different temperatures affect the antigen binding, charge, or composition of the antibody. Please note that the shelf life given on the first page is based on real time stability testing at 2–8 °C in the product buffer.

Miscellaneous -

References -

