

Technical Data Sheet

Product Name	<i>Biotin - ACTH (1 - 39), human</i> <i>Biotin - SYSMEHFRWGKPVGKKRRPVKVPNGAEDESAAEAFPLEF</i>
Size	0.5 mg
Catalog #	AS-23968
Purity	% Peak Area By HPLC \geq 95%
Description	This C-terminally labeled biotin ACTH (1-39) has been used in ELISA assays. Adrenocorticotropin hormone (ACTH), also known as corticotropin, is a cleavage product from a larger precursor proopiomelanocortin (POMC). This 39 amino acid-peptide hormone is produced in the anterior pituitary gland upon stimulation by the corticotropin releasing hormone from the hypothalamus in response to stress. It stimulates the secretion of steroid hormone, specifically glucocorticoids in the adrenal cortex by acting through a cell membrane receptor (ACTH-R). In mammals, the action of ACTH is limited to those areas of the adrenal cortex in which the glucocorticoid hormones cortisol (hydrocortisone) and corticosterone are formed. ACTH has little control over the secretion of aldosterone, the other major steroid hormone from the adrenal cortex.
Storage	-20°C
References	Moreno-Guzmán, M. et al. <i>Biosensors Bioelectronics</i> 35 , 82 (2012). doi: 10.1016/j.bios.2012.02.015 Stewart, PM. et al. <i>Clin Endocrinol</i> 40 , 199 (1994) Elias, LL. and AJ. Clark, <i>Braz J Med Biol Res</i> 33 , 1245 (2000) Latronico, AC. <i>Braz J Med Biol Res</i> 33 , 1249 (2000)
Molecular Weight	4768.4
Sequence (One-Letter Code)	Biotin-SYSMEHFRWGKPVGKKRRPVKVPNGAEDESAAEAFPLEF
Sequence (Three-Letter Code)	Biotin - Ser - Tyr - Ser - Met - Glu - His - Phe - Arg - Trp - Gly - Lys - Pro - Val - Gly - Lys - Lys - Arg - Arg - Pro - Val - Lys - Val - Tyr - Pro - Asn - Gly - Ala - Glu - Asp - Glu - Ser - Ala - Glu - Ala - Phe - Pro - Leu - Glu - Phe - OH
Product Citations	Moreno-Guzmán, M. et al. (2012). Ultrasensitive detection of adrenocorticotropin hormone (ACTH) using disposable phenylboronic-modified electrochemical immunosensors. <i>Biosensors Bioelectronics</i> 35, 82. doi: 10.1016/j.bios.2012.02.015.