

DESCRIPTION

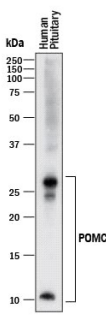
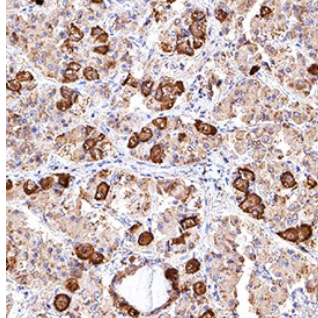
Species Reactivity	Human
Specificity	Detects human POMC in immunohistochemistry.
Source	Monoclonal Mouse IgG ₁ Clone # 967905
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human Adrenocorticotrophic hormone/ACTH) synthetic peptide Accession # P01189
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.5 µg/mL	See Below
Immunohistochemistry	5-25 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human POMC by Western Blot. Western blot shows lysates of human pituitary gland tissue. PVDF membrane was probed with 0.5 µg/mL of Mouse Anti-Human POMC Monoclonal Antibody (Catalog # MAB9498) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). Specific bands were detected for POMC at approximately 10-30 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>POMC in Human Pituitary. POMC was detected in immersion fixed paraffin-embedded sections of human pituitary using Mouse Anti-Human POMC Monoclonal Antibody (Catalog # MAB9498) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to corticotroph cells. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Adrenocorticotrophic hormone (ACTH)/corticotropin is a 39 amino acid peptide generated by cleavage of the POMC, a preprotein which also can also be cleaved to produce MSH, Beta-endorphin and Met-enkephalin, depending on tissue expression and context. ACTH is a ligand for the ACTH receptor, also known as melanocortin receptor 2. ACTH is secreted by the anterior pituitary gland upon stimulation by corticotropin-releasing hormone (CRH) which is secreted by the hypothalamus. The principal effect of ACTH is production of cortisol by the adrenal gland but it also mediates bone formation and osteoblast survival. ACTH has been shown to induce insulin resistance in adipocytes and promote pro-inflammatory adipokine secretion.