

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human E6AP/UBE3A in Western blots.
Source	Recombinant Monoclonal Mouse IgG ₁ Clone # 1077332
Purification	Protein A or G purified from cell culture supernatant
Immunogen	<i>Spodoptera frugiperda</i> , Sf 21 (baculovirus)-derived human E6AP/UBE3A Met1-Leu875 Accession # Q05086
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.

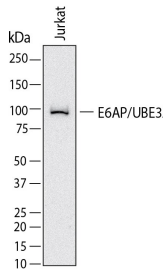
APPLICATIONS

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	2 µg/mL	Jurkat human acute T cell leukemia cell line
Simple Western	20 µg/mL	K562 human chronic myelogenous leukemia cell line

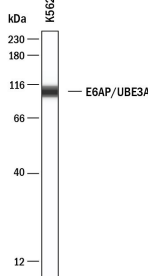
DATA

Western Blot




Detection of Human E6AP/UBE3A by Western Blot. Western Blot shows lysates of Jurkat human acute T cell leukemia cell line. PVDF membrane was probed with 2 µg/ml of Mouse Anti-Human E6AP/UBE3A Monoclonal Antibody (Catalog # MAB11498) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for E6AP/UBE3A at approximately 98 kDa (as indicated). This experiment was conducted under reducing conditions and using Western Blot Buffer Group 1.

Simple Western



Detection of Human E6AP/UBE3A by Simple Western™. Simple Western shows lysates of K562 human chronic myelogenous leukemia cell line, loaded at 0.2 mg/ml. A specific band was detected for E6AP/UBE3A at approximately 106 kDa (as indicated) using 20 µg/mL of Mouse Anti-Human E6AP/UBE3A Monoclonal Antibody (Catalog # MAB11498). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS. For liquid material, refer to CoA for concentration.
Shipping	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
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

Ubiquitin-protein ligase E3A, also known as E6AP, is an E3 ligase that accepts ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and transfers it to its substrates. Several key substrates for UBE3A have been identified, including BMAL1, the PML tumor suppressor, PGR, and p53/TP53 suggesting a role for UBE3A in regulation of the circadian clock, tumor regulation, transcriptional coactivation of the progesterone receptors, and regulation of neoplastic progression of cells infected by high-risk human papilloma virus (1-4). Defects in activity are linked to Angelman syndrome, a neurodevelopmental disorder, as well as autism spectrum disorders implicating a role for UBE3A in regulation of neurobiological functions (3, 5, 6).

References:

1. Dhananjayan, S.C. *et al.* (2006) *Mol. Endocrinol.* **20**:2343.
2. Louria-Hayon, I. *et al.* (2009) *Cell Death Differ.* **16**:1156.
3. Martinez-Noel, G. *et al.* (2012) *Mol. Cell. Biol.* **32**:3095.
4. Gossan, N.C. *et al.* (2014) *Nucleic Acids Res.* **42**:5765.
5. Sadikovic, B. *et al.* (2014) *Hum. Mutat.* **35**:1407.
6. Khatri, N. and H-Y Man. (2019) *Front. Mol. Neurosci.* **12**:109.

