biotechne® RDsystems

Catalog Number: AF5059

SYSTEMS

DESCRIPTION		
Species Reactivity	Human	
Specificity	cificity Detects human AP-2γ in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human (r is observed.	
Source	Polyclonal Goat IgG	
Purification	Antigen Affinity-purified	
Immunogen	<i>E. coli</i> -derived recombinant human AP-2γ Leu128-Val223 Accession # Q92754	
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	See Below	
Immunohistochemistry	5-15 μg/mL	See Below	

DATA



Detection of Human AP-2y by Western Blot. Western Blot shows lysates of MCF-7 human breast cancer cell line, T47D human breast cancer cell line, MDA-MB-468 human breast cancer cell line and SK-BR-3 human breast cancer cell line PVDF membrane was probed with 2 µg/ml of Goat Anti-Human AP-2γ Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5059) followed by HRPconjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for AP-2y at approximately 49 kDa (as indicated). This experiment was conducted under reducing conditions and using Western Blot Buffer Group 1.

Immunohistochemistry



AP-2y in Human Breast Cancer Tissue. AP-2 damma was detected in immersion fixed paraffin-embedded sections of human breast cancer tissue using 10 µg/mL Goat Anti-Human AP-2 gamma Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5059) overnight at 4 °C. Before incubation with the primary antibody tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # Catalog # CTS013). Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

PREPARATION AND S	STORAGE	
Reconstitution	Reconstitute at 0.2 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. 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

AP-2γ (Activation protein 2 gamma; also ERF-1) is a 50-55 kDa member of the AP-2 transcription factor family. It is essential for kidney development and placentation of the embryo. In the nucleus, it forms homodimers and heterodimers with other AP-2 family members. Elevated AP-2 family members are highly suggestive of neoplasia. Human AP-2γ is 450 amino acids in length. It contains a repressor SUMOylation site as Lys10, a Gln/Pro-rich transactivation domain (aa 30-119) and a helix-span-helix dimerization region (aa 293-424). One potential splice form exists that shows a four aa substitution for the N-terminal 16 aa, followed by a premature truncation after Gly130. Over aa 128-223, human AP-2γ shares 91% and 82% aa sequence identity with porcine and mouse AP-2γ, respectively.

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