Human Host Cell Factor 1/HCFC1 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF6254

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Host Cell Factor 1/HCFC1 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human Host Cell Factor 1/HCFC1 Ala1626-Val1836 Accession # P51610
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 as a 0.2 µm filtered solution in PBS.

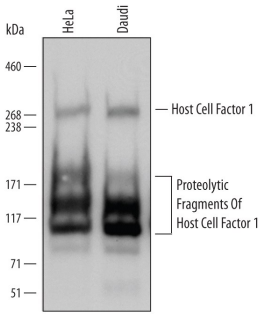
APPLICATIONS

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	1 µg/mL	See Below

DATA

Western Blot



Detection of Human Host Cell Factor 1/HCFC1 by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line and Daudi human Burkitt's lymphoma cell line. PVDF Membrane was probed with 1 µg/mL of Human Host Cell Factor 1/HCFC1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6254) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). Specific bands were detected for Host Cell Factor 1/HCFC1 at approximately 300 kDa (as indicated) and proteolytic fragments of Host Cell Factor 1/HCFC1 at approximately 100 to 175 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
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.** ● 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

HCF-1 (Host cell factor; also called C1 factor and VCAF) is a blanket name for a group of polypeptides that are generated through the targeted proteolysis of a large 300 kDa transcriptional coactivator precursor. The precursor is widely expressed, and its products are posited to participate in multiple activities, such as mRNA processing, transcriptional coactivation, and cell cycle progression through G0/G1 transition. Human HCF-1 is 2035 amino acids (aa) in length. It is modular in structure, and contains a Kelch-repeat region (aa 32-313), an SP1/GABP basic binding sequence (aa 478-875), an acidic transactivation domain (aa 1530-1735), and a C-terminal NLS-containing Trp/Tyr/Phe-rich region (aa 1760-2035). Situated between the basic and acidic regions is an HCF repeat region (aa 1010-1439) that contains six 26 aa repeats that undergo autocatalytic cleavage. HCF-1 is O-glycosylated, phosphorylated and acetylated. In quiescent cells, the full-length 300 kDa precursor can be found in the cytoplasm, along with a presumed 50 kDa fragment that appears to represent some sequence between aa 300-1000. In activated cells, HCF-1 appears in the nucleus, and undergoes autocatalysis at one or more sites occurs distal to Glu at position 1019, 1081, 1110, 1295, 1323, and 1423. This generates multiple fragments that noncovalently associate with each other and appear as bands in SDS-Page that range from 100-175 kDa in size. This association is quite vigorous and requires aggressive treatment to achieve denaturation. There is one potential isoform that contains an alternative start site at Met100, a second isoform that shows a deletion of aa 1072-1101, a third isoform that exhibits a Leu substitution for aa 428-2035, and a final isoform that shows a deletion of aa 382-450. Over aa 1626-1836, human HCF-1 shares 95% aa identity with mouse HCF-1.

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USA & CANADA Tel: (800) 343-7475 **EUROPE** Tel: +44 (0)1235 529449 **CHINA** Tel: +86 (21) 52380373