

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Host Cell Factor 1/HCF1 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Host Cell Factor 1/HCF1 Ala1626-Val1836 Accession # P51610
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

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.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

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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