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HERC5 antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI12234

Product Information

Application	WB
Primary Accession	Q9UII4
Other Accession	NM_016323, NP_057407
Reactivity	Human, Dog, Bovine
Predicted	Human, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	116852

Additional Information

Gene ID	51191
Alias Symbol	CEB1, CEBP1
Other Names	E3 ISG15--protein ligase HERC5, 6.3.2.-, Cyclin-E-binding protein 1, HECT domain and RCC1-like domain-containing protein 5, HERC5, CEB1, CEBP1
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-HERC5 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	HERC5 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

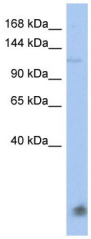
Name	HERC5
Synonyms	CEB1, CEBP1
Function	Major E3 ligase for ISG15 conjugation (PubMed: 26355087, PubMed:27534820, PubMed:27564865, PubMed:34572049, PubMed:37279284). Acts as a positive regulator of innate antiviral response in cells induced by interferon. Functions as part of the ISGylation machinery that recognizes target proteins in a broad and relatively non-specific manner. Catalyzes ISGylation of IRF3 which results in sustained activation, it attenuates IRF3-PIN1 interaction, which antagonizes IRF3 ubiquitination and degradation, and boosts the antiviral response. Mediates ISGylation of the

	phosphatase PTEN leading to its degradation, thus alleviating its suppression of the PI3K-AKT signaling pathway and promoting the production of cytokines that facilitate bacterial clearance (PubMed:37279284). Interferes with the function of key viral structural proteins such as ebolavirus structural protein VP40 or HIV-1 protein GAG (PubMed:22093708, PubMed:34572049). Catalyzes ISGylation of influenza A viral NS1 which attenuates virulence; ISGylated NS1 fails to form homodimers and thus to interact with its RNA targets. Catalyzes ISGylation of papillomavirus type 16 L1 protein which results in dominant-negative effect on virus infectivity. Physically associated with polyribosomes, broadly modifies newly synthesized proteins in a cotranslational manner. In an interferon-stimulated cell, newly translated viral proteins are primary targets of ISG15. Promotes parkin/PRKN ubiquitin E3 ligase activity by suppressing the intramolecular interaction that maintains its autoinhibited conformation (PubMed:27534820).
Cellular Location	Cytoplasm, perinuclear region. Cytoplasm Note=Associated with the polyribosomes, probably via the 60S subunit
Tissue Location	Expressed in testis and to a lesser degree in brain, ovary and placenta. Found in most tissues at low levels

References

Salon,C.,(2007)Oncogene26(48),6927-6936ReconstitutionandStorage:Forshorttermuse,storeat2-8Cupto1week.Forlongtermstorage,storeat-20Cinsmallaliquotstopreventfreeze-thawcycles.

Images



WB Suggested Anti-HERC5 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:62500
Positive Control: HT1080 cell lysate