SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

[Primary Antibody]

Rabbit Anti-HGS antibody

Catalog Number: SL15473R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	HGS
Immunogen:	KLH conjugated synthetic peptide derived from human HGS : 301-400/777
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	IHC-P=1:100-500 IHC-F=1:100-500 IF=1:100-500 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Rat(predicted:Human,Mouse,Dog,Cow,Horse,Sheep)
Predicted MW.:	86kDa
Subcellular Location:	cytoplasmic The cell membrane
Background:	HGS is a regulates endosomal sorting and plays a critical role in the recycling and degradation of membrane receptors. The encoded protein sorts monoubiquitinated membrane proteins into the multivesicular body, targeting these proteins for lysosome-dependent degradation. [provided by RefSeq, Dec 2010]. **Function:** Involved in intracellular signal transduction mediated by cytokines and growth factors. When associated with STAM, it suppresses DNA signaling upon stimulation by IL-2 and GM-CSF. Could be a direct effector of PI3-kinase in vesicular pathway via early endosomes and may regulate trafficking to early and late endosomes by recruiting clathrin. May concentrate ubiquitinated receptors within clathrin-coated regions. Involved in down-regulation of receptor tyrosine kinase via multivesicular body (MVBs) when complexed with STAM (ESCRT-0 complex). The

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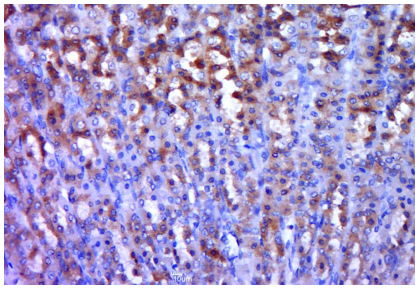
	ESCRT-0 complex binds ubiquitin and acts as sorting machinery that recognizes ubiquitinated receptors and transfers them to further sequential lysosomal sorting/trafficking processes. May contribute to the efficient recruitment of SMADs to the activin receptor complex. Involved in receptor recycling via its association with the CART complex, a multiprotein complex required for efficient transferrin receptor recycling but not for EGFR degradation. **Subunit:** Interacts with TRAK1. Interacts with TRAK2 (By similarity). Interacts with TRAK1. Component of the ESCRT-0 complex composed of STAM or STAM2 and HGS. Part of a complex at least composed of HSG, STAM2 (or probably STAM) and EPS15. Interacts with STAM. Interacts with STAM2. Interacts with EPS15; the interaction is direct, calcium-dependent and inhibited by SNAP25. Interacts with NF2; the interaction is direct. Interacts with ubiquitin; the interaction is direct. Interacts with VPS37C. Interacts with SMAD1, SMAD2 and SMAD3. Interacts with TSG101; the interaction mediates the association with the ESCRT-I complex. Interacts with SNAP25; the interaction is direct and decreases with addition of increasing concentrations of free calcium. Interacts with SNX1; the interaction is direct. Component of a 550 kDa membrane complex at least composed of HGS and SNX1 but excluding EGFR. Component of the CART complex, at least composed of ACTN4, HGS/HRS, MYO5B and TRIM3. **Subcellular Location:** Cytoplasm. Early endosome membrane; Peripheral membrane protein; Cytoplasmic side. Endosome, multivesicular body membrane; Peripheral membrane protein. **Tissue Specificity:** Ubiquitous expression in adult and fetal tissues with higher expression in testis and peripheral blood leukocytes. **Post-translational modifications:** Phosphorylated on Tyr-334. A minor site of phosphorylation on Tyr-329 is detected. Phosphorylation occurs in response to EGF, IL-2, GM-CSF and HGF. Ubiquitinated by ITCH. **Similarity:** Contains 1 FYVE-type zinc finger. Contains 1 UIM (ubiquitin-interacting motif) repeat. Contains 1 VHS domain. **Database links:** **Entrez Gene:** 9146 Human **Entrez Gene:** 15239 Mouse **Entrez Gene:** 56084 Rat

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	Omim: 604375 Human **SwissProt:** O14964 Human **SwissProt:** Q99LI8 Mouse **SwissProt:** Q9JJ50 Rat **Unigene:** 514590 Human **Unigene:** 7919 Mouse **Unigene:** 21 Rat

[VALIDATION IMAGES]



Paraformaldehyde-fixed, paraffin embedded (rat stomach tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (HGS) Polyclonal Antibody, Unconjugated (SL15473R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

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