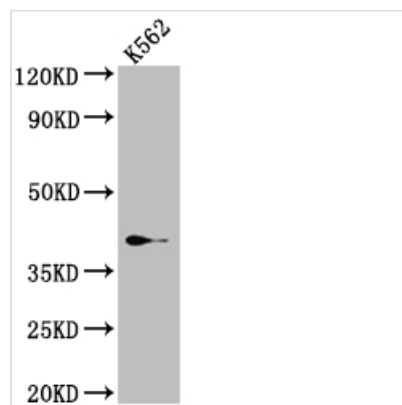




SAE1 Antibody

| | |
|----------------------------|---|
| Product Code | CSB-RA987582A0HU |
| Storage | Upon receipt, store at -20°C or -80°C. Avoid repeated freeze. |
| Uniprot No. | Q9UBE0 |
| Immunogen | A synthesized peptide derived from human SAE1 |
| Species Reactivity | Human |
| Tested Applications | ELISA, WB, IF; Recommended dilution: WB:1:500-1:5000, IF:1:20-1:200 |
| Relevance | The heterodimer acts as an E1 ligase for SUMO1, SUMO2, SUMO3, and probably SUMO4. It mediates ATP-dependent activation of SUMO proteins followed by formation of a thioester bond between a SUMO protein and a conserved active site cysteine residue on UBA2/SAE2. |
| Form | Liquid |
| Conjugate | Non-conjugated |
| Storage Buffer | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. |
| Purification Method | Affinity-chromatography |
| Isotype | Rabbit IgG |
| Clonality | Monoclonal |
| Product Type | Recombinant Antibody |
| Immunogen Species | Homo sapiens (Human) |
| Research Area | Cell biology |
| Gene Names | SAE1 |
| Accession NO. | 9D8 |

Image



Western Blot

Positive WB detected in: K562 whole cell lysate

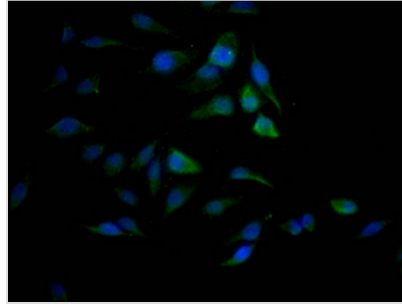
All lanes: SAE1 Antibody at 1:1000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 39, 30, 34 kDa

Observed band size: 39 kDa



Immunofluorescence staining of HeLa Cells with CSB-RA987582A0HU at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

SAE1 is an E-activating enzyme that plays a vital role in SUMOylation, a post-translational modification involved in cellular events such as regulation of transcription, cell cycle, and apoptosis. SAE1 forms a thioester bond between SUMO protein and UBA2/SAE2 by regulating the activation of ATP-dependent SUMO protein and then participates in the process of SUMO protein modification. SAE1 mainly mediates acetylation and phosphorylation and plays an important role in chromosome division and apoptosis. Upregulated expression of SAE1 has been implicated in the tumorigenesis and progression of several human malignancies, including glioma and gastric cancer.

The main steps in the production of this SAE1 recombinant antibody include immunization; harvest of positive spleen cells; obtaining the antibody sequence by screening and sequencing; expression of the target antibody in mammalian cells; purification. The SAE1 antibody was produced recombinantly and has many advantages: high reproducibility, specificity and scalability. And has been validated in ELISA, WB, IF.