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## SUZ12 Recombinant Monoclonal Antibody

Product Code	CSB-RA159561A0HU	
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.	
Uniprot No.	Q15022	
Immunogen	A synthesized peptide derived from human SUZ12	
Species Reactivity	Human	
Tested Applications	ELISA, WB, IHC, IP; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IP:1:200-1:1000	
Relevance	Polycomb group (PcG) protein. Component of the PRC2/EED-EZH2 complex, which methylates 'Lys-9' (H3K9me) and 'Lys-27' (H3K27me) of histone H3, leading to transcriptional repression of the affected target gene. The PRC2/EED-EZH2 complex may also serve as a recruiting platform for DNA methyltransferases, thereby linking two epigenetic repression systems. Genes repressed by the PRC2/EED-EZH2 complex include HOXC8, HOXA9, MYT1 and CDKN2A.	
Form	Liquid	
Form Conjugate	Liquid Non-conjugated	
	•	
Conjugate	Non-conjugated Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium	
Conjugate Storage Buffer	Non-conjugated Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.	
Conjugate Storage Buffer Purification Method	Non-conjugatedRabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Affinity-chromatography	
Conjugate Storage Buffer Purification Method Isotype	Non-conjugated   Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.   Affinity-chromatography   Rabbit IgG	
Conjugate Storage Buffer Purification Method Isotype Clonality	Non-conjugated   Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.   Affinity-chromatography   Rabbit IgG   Monoclonal	
Conjugate Storage Buffer Purification Method Isotype Clonality Product Type	Non-conjugated   Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.   Affinity-chromatography   Rabbit IgG   Monoclonal   Recombinant Antibody	
Conjugate Storage Buffer Purification Method Isotype Clonality Product Type Immunogen Species	Non-conjugated   Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.   Affinity-chromatography   Rabbit IgG   Monoclonal   Recombinant Antibody   Homo sapiens (Human)	
Conjugate Storage Buffer Purification Method Isotype Clonality Product Type Immunogen Species Research Area	Non-conjugatedRabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Affinity-chromatographyRabbit IgGMonoclonalRecombinant AntibodyHomo sapiens (Human)Epigenetics and Nuclear Signaling	

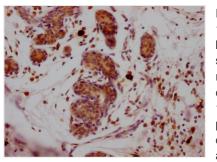
Image

$120\text{KD} \rightarrow \qquad $	Western Blot Positive WB detected in: Hela whole cell lysate, HepG2 whole cell lysate, MCF-7 whole cell lysate, HL60 whole cell lysate, THP-1 whole cell lysate, K562 whole cell lysate All lanes: SUZ12 antibody at 1:2000 Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 84 kDa Observed band size: 90 kDa
$20 \text{KD} \rightarrow$	

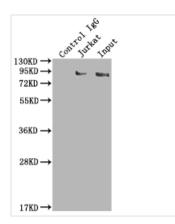
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IHC image of CSB-RA159561A0HU diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



Immunoprecipitating SUZ12 in K562 whole cell lysate

Lane 1: Rabbit control IgG instead of CSB-RA159561A0HU in K562 whole cell lysate. For western blotting,a HRP-conjugated Protein G antibody was used as the secondary antibody (1/2000)

Lane 2: CSB-RA159561A0HU(2µg)+ K562 whole cell lysate(500µg) Lane 3: K562 whole cell lysate (10µg)

## Description

SUZ12 is a core component of the PRC2 complex that plays an essential role in PRC2-mediated gene silencing by producing trimethylation on H3K27me3. SUZ12 is rarely expressed in normal tissues, but amplification and overexpression of SUZ12 have been detected in several solid malignancies including ovarian, colorectal, and breast cancer. Its abnormal overexpression is commonly related to tumor aggressive behaviors like enhanced proliferation, invasion, and metastasis, as well as advanced clinicopathological characteristics, and reduced survival. SUZ12 has also been shown to play a role in the cell cycle and X chromosome inactivation.

The main steps in the production of this SUZ12 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 SUZ12 antibody was produced recombinantly and has many advantages: high reproducibility, specificity and scalability. And has been validated in ELISA, WB, IHC, IP.