

# [KO Validated] RAG2 Rabbit Polyclonal Antibody



CAB5626

## Product Information

### Size:

20uL, 50uL, 100uL, 200uL

### Observed MW:

59kDa

### Calculated MW:

59kDa

### Applications:

WB IF

### Reactivity:

Human, Mouse

## Antibody Information

### Recommended dilutions:

WB 1:500 - 1:2000 IF 1:50 - 1:200

### Source:

Rabbit

### Isotype:

IgG

### Purification:

Affinity purification

## Protein Background

This gene encodes a protein that is involved in the initiation of V(D)J recombination during B and T cell development. This protein forms a complex with the product of the adjacent recombination activating gene 1, and this complex can form double-strand breaks by cleaving DNA at conserved recombination signal sequences. The recombination activating gene 1 component is thought to contain most of the catalytic activity, while the N-terminal of the recombination activating gene 2 component is thought to form a six-bladed propeller in the active core that serves as a binding scaffold for the tight association of the complex with DNA. A C-terminal plant homeodomain finger-like motif in this protein is necessary for interactions with chromatin components, specifically with histone H3 that is trimethylated at lysine 4. Mutations in this gene cause Omenn syndrome, a form of severe combined immunodeficiency associated with autoimmune-like symptoms.

## Immunogen information

### Gene ID:

5897

### Uniprot

P55895

### Synonyms:

RAG2; RAG-2

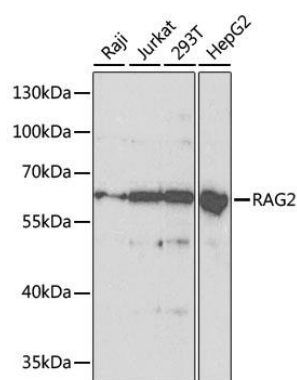
### Immunogen:

Recombinant fusion protein containing a sequence corresponding to amino acids 258-527 of human RAG2 (NP\_001230715.1).

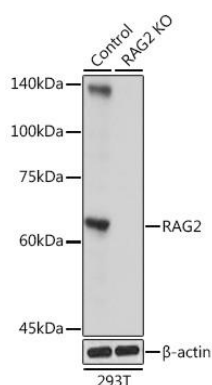
### Storage:

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

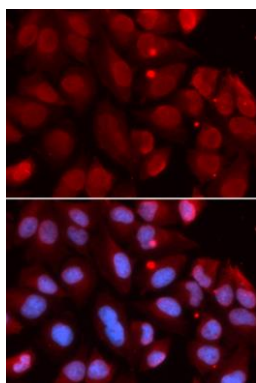
## Product Images



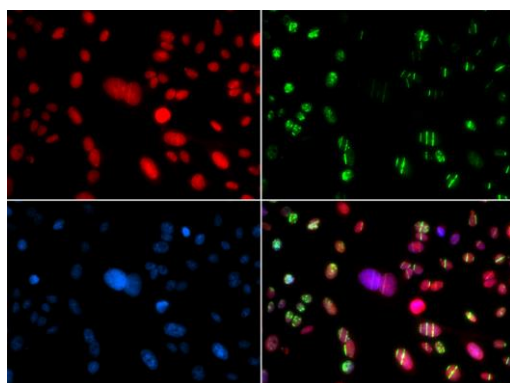
Western blot analysis of extracts of various cell lines, using RAG2 antibody (CAB5626) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (CABM00020). Exposure time: 90s.



Western blot analysis of extracts from normal (control) and RAG2 Rabbit pAb knockout (KO) 293T cells, using RAG2 Rabbit pAb antibody (CAB5626) at 1:500 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (CABM00020). Exposure time: 1s.



Immunofluorescence analysis of U2OS cells using RAG2 antibody (CAB5626). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of GFP-RNF168 transgenic U2OS cells using RAG2 antibody (CAB5626). GFP-RNF168 fusion protein expression for DNA damage marker. Blue: DAPI for nuclear staining. RNF168(GFP) can be used to mark cells damaged by UV-A laser for they always gather around DNA damage region.