## **CAD** Antibody

Catalog No: #24038



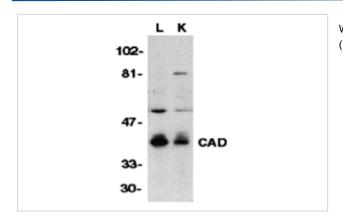
Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

Description	Support: tech@signalwayantibody.com
Product Name	CAD Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Affinity chromatography purified via peptide column
Applications	ELISA WB IHC
Species Reactivity	Ms
Immunogen Type	Peptide
Immunogen Description	Raised against a peptide corresponding to amino acids 314 to 329 of murine CAD.
Target Name	CAD
Other Names	DFF40
Accession No.	O54788
Uniprot	O54788
GeneID	13368;
Concentration	1mg/ml
Formulation	Supplied in PBS containing 0.02% sodium azide.
Storage	Can be stored at -20°C, stable for one year. As with all antibodies care should be taken to avoid repeated
	freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

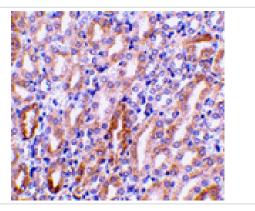
## Application Details

Predicted MW: 40 kd

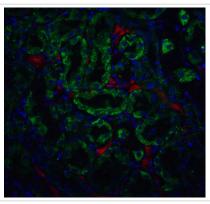
## **Images**



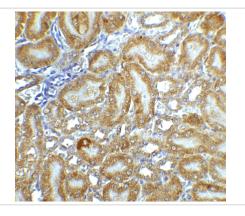
Western blot analysis of CAD in mouse lung (L) and kidney (K) tissue lysates with CAD antibody at 1:500 dilution.



Immunohistochemistry of CAD in mouse kidney tissue with CAD antibody at 1 ug/mL.



Immunofluorescence of CAD in mouse kidney tissue with CAD antibody at 5  $\mu g/ml$ .



Immunohistochemistry of CAD in mouse kidney tissue with CAD antibody at 5  $\mu$ g/ml.

## Background

Apoptosis is related to many diseases and induced by a family of cell death receptors and their ligands. Cell death signals are transduced by death domain containing adapter molecules and members of the caspase family of proteases. These death signals finally cause the degradation of chromosomal DNA by activated DNase. A mouse DNase that causes DNA fragmentation was identified recently and designated CAD (for caspase activated deoxyribonuclease). The human homologue of mouse CAD was more recently identified by two groups independently and termed CPAN and DFF40. Human DFF45 and its mouse homologue ICAD are the inhibitors of CPAN/DFF40 and CAD, respectively. Upon cleavage of DFF45/ICAD by activated caspase, DFF40/CAD is released and activated and eventually causes the degradation of DNA in the nuclei. Activation of CAD/DFF40, which causes DNA degradation, is the hallmark of apoptotic cell death.

Note: This product is for in vitro research use only