

AID

CONTACT INFORMATION:	Monoclonal Antibodies Unit. Centro Nacional de Investigaciones Oncológicas
STATUS:	Validated
TYPE:	mouse anti human
CLONE NAME:	JUA51E
PROTEIN:	Activation induced cytidine deaminase
PROTEIN WEB:	http://www.hprd.org/summary?hprd_id=05585&isoform_id=05585_1&isoform_name=Isoform_1
ANTIGEN USED:	EVDDLRLDAFRMLGF peptide
FUSION PARTNER:	NS1/Ag4-1 (NS1) cells
ISOTYPE:	IgG1
SPECIES REACTIVITY:	human
PREPARATION AND STORAGE:	Aliquot and store at 4C. Do not freeze

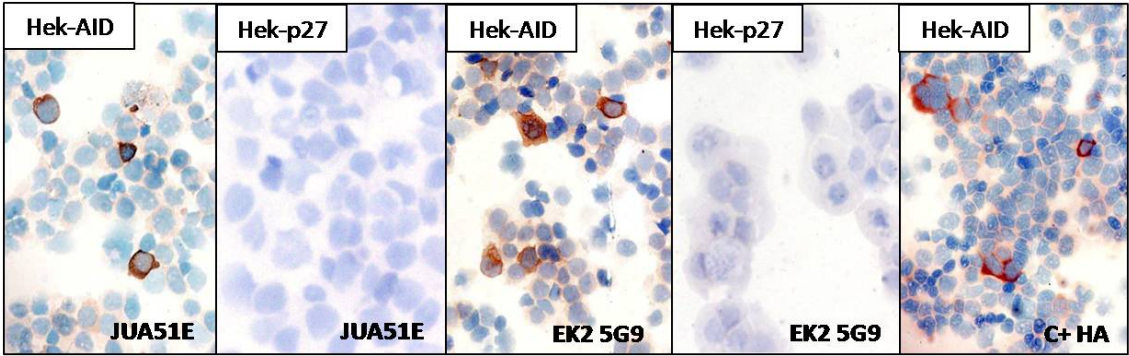
DESCRIPTION

Maturation of the antibody repertoire is mediated by two different mechanisms: class-switch recombination (CSR) and somatic hypermutation (SHM). These two processes are T cell dependent and occur in the germinal centres of secondary lymphoid organs. CSR leads to the production of antibodies of different isotypes whereas SHM leads to the selection of B cells expressing a BCR with high affinity for antigen. The activation-induced cytidine deaminase (AID) was recently shown to play a key role in these two mechanisms, demonstrating for the first time that these maturation processes share a common mechanism. There is evidence that AID is involved in the somatic DNA alterations required for CSR and SHM.

APPLICATIONS

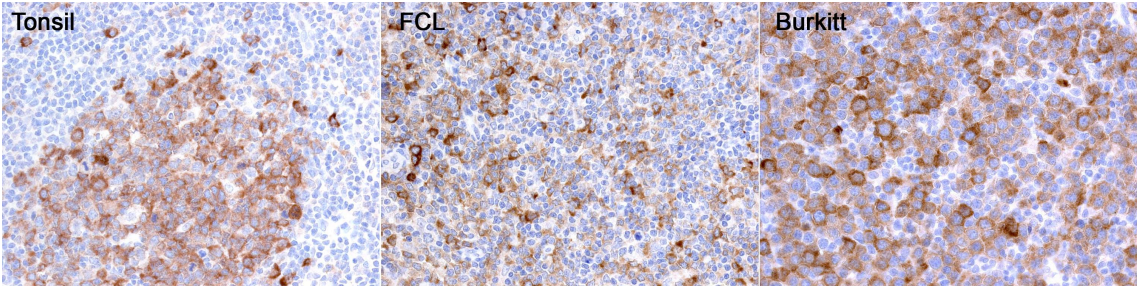
IHC Techniques	Clone	Dilution	Antibody concentration	Antigen retrieval method	Visualization kit	Positive control	Negative control	Protein localization	Positivity in other species
Frozen tissue and cytopins									
Paraffin tissue									

Recommended	JUA51 E	1:2	Supernatant	Tris-EDTA	Novolink	Tonsil		nuclear and cytoplasmic	
Immunofluorescence									
Recommended	JUA51 E	undiluted	supernatant	Tris-EDTA		Tonsil		nuclear and cytoplasmic	

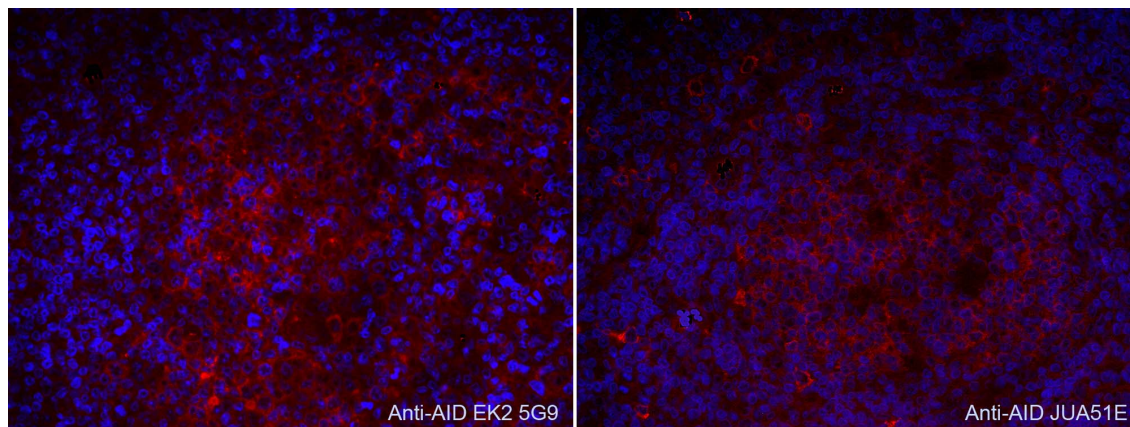


JUA51E mAb in transfected cells.

Cytoplasmic staining on frozen cytospin preparations of transfected HEK293T/AID cells using antibody JUA51E. HEK293T/p27 transfected cells were used as negative control. Anti-HA and anti-AID (EK2 clone) were used as positive controls.



JUA51E mAb in paraffin sections.



AID (JUA51E) immunofluorescence in human tonsil

Anti-AID (EK2) was used as positive control.

WB Techniques	Clone	Dilution	Antibody concentration	Positive control	Negative control	Expected MW	Observed Mw	Positivity in other species
Western Blotting								
Recommended	JUA51E	Undiluted	Supernatant	Daudi cell line		24kDa	26kDa	
Immunoprecipitation								



Western Blotting of AID (JUA51E) using different human cell lines.

- Lane 1 Hek-AID-HA (30ug) (+)
- Lane 2 Hek-AID-HA (30ug) (+)
- Lane 3 Hek-PSF1 (30ug) (-)
- Lane 4 Ramos cell line (100ug) (-)
- Lane 5 Jurkat cell line (100ug) (-)
- Lane 6 Daudi cell line (100ug) (+)
- Lane 7 BL2 cell line (100ug) (-)
- Lane 8 Alewife cell line (100ug) (-)
- Lane 9 Human tonsil (100ug) (-)