

## Rabbit DAI Polyclonal Antibody | anti-DAI antibody

RABBIT ANTI DAI

|                              |                       |                                                                  |
|------------------------------|-----------------------|------------------------------------------------------------------|
| CATALOG #<br><b>AAA50046</b> | HOST<br><b>Rabbit</b> | APPLICATIONS<br><b>Western Blot, Immunohistochemistry, ELISA</b> |
|------------------------------|-----------------------|------------------------------------------------------------------|

### PRODUCT SYNONYMS

DAI; Polyclonal Antibody; RABBIT ANTI DAI; anti-DAI antibody

### PRODUCT SPECIFICATIONS

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                          | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Clonality                                     | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Isotype                                       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Specificity                                   | <p>This product recognizes human DAI, also known as Z-DNA Binding Protein (ZBP1), a 46kDa DNA binding protein belonging to a family of proteins that contain a Za domain which specifically binds to the left-handed Z-DNA and Z-RNA.</p> <p>Initial studies suggested that DAI may be involved in processes such host response to neoplasia. Additional research has indicated that the cytosolic DAI can act like the toll-like receptor TLR9 by detecting cytosolic double-stranded (ds) DNA and trigger induction of type I interferon and other innate immune responses. It is thought that the binding of DAI to dsDNA enhances its association with innate immune response proteins such as the IRF3 transcription factor and the serine/threonine kinase TBK1 (also known as NAK).</p> <p>DAI is highly expressed in lymphatic tissues such as lymph nodes, leukocytes, tonsil, bone marrow and spleen. Expression at a lower level is also seen in thymus, lung and liver. It has been demonstrated that multiple isoforms of DAI exist.</p> |
| Form/Format                                   | Purified<br>Purified IgG - liquid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Concentration                                 | IgG concentration 1.0mg/ml (varies by lot)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Sequence Length                               | 428                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Applicable Applications for anti-DAI antibody | WB (Western Blot), IHC (Immunohistochemistry), ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Perservative Stabilisers                      | 0.02% Sodium Azide (NaN <sub>3</sub> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Immunogen                                     | Synthetic peptide corresponding to an 18 amino acid sequence from near the carboxy terminus of human ZBP1. Buffer Solution                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Antiserum Preparation                         | Antisera to human DAI were raised by repeated immunisation of rabbits with highly purified antigen. Purified IgG prepared from whole serum by affinity chromatography.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Target Species                                | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Preparation and Storage                       | Store at 4 degree C or at -20 degree C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Should this product contain a precipitate we recommend microcentrifugation before use. Shelf Life: 18 months from date of despatch.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

IMAGES



Application Data

Formalin fixed, paraffin embedded human small intestine stained with Rabbit anti Human DAI following heat mediated antigen retrieval using sodium citrate buffer (pH6.0)



Application Data

Western blot analysis of mouse small intestine lysate probed with Rabbit anti Human DAI at 0.5(A), 1(B) and 2(C)

ADDITIONAL INFORMATION

Related Product Information for anti-DAI antibody

This product recognizes human DAI, also known as Z-DNA Binding Protein (ZBP1), a 46kDa DNA binding protein belonging to a family of proteins that contain a Za domain which specifically binds to the left-handed Z-DNA and Z-RNA. Initial studies suggested that DAI may be involved in processes such host response to neoplasia. Additional research has indicated that the cytosolic DAI can act like the toll-like receptor TLR9 by detecting cytosolic double-stranded (ds) DNA and trigger induction of type I interferon and other innate immune responses. It is thought that the binding of DAI to dsDNA enhances its association with innate immune response proteins such as the IRF3 transcription factor and the serine/threonine kinase TBK1 (also known as NAK). DAI is highly expressed in lymphatic tissues such as lymph nodes, leukocytes, tonsil, bone marrow and spleen. Expression at a lower level is also seen in thymus, lung and liver. It has been demonstrated that multiple isoforms of DAI exist.

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                                                                                            |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 238550208                                                                                                                                                                                                                  |
| NCBI GeneID                      | 81030                                                                                                                                                                                                                      |
| NCBI Accession #                 | NP_001153889.1                                                                                                                                                                                                             |
| NCBI GenBank Nucleotide #        | NM_001160417.1                                                                                                                                                                                                             |
| UniProt Accession #              | Q9H171; Q5JY39; Q9BYW4; A2A2F7; B3KVA1; F5GYT1                                                                                                                                                                             |
| Molecular Weight                 | 38,220 Da                                                                                                                                                                                                                  |
| NCBI Official Full Name          | Z-DNA-binding protein 1 isoform b                                                                                                                                                                                          |
| NCBI Official Synonym Full Names | Z-DNA binding protein 1                                                                                                                                                                                                    |
| NCBI Official Symbol             | ZBP1                                                                                                                                                                                                                       |
| NCBI Official Synonym Symbols    | DAI; DLM1; DLM-1; C20orf183                                                                                                                                                                                                |
| NCBI Protein Information         | Z-DNA-binding protein 1; DNA-dependent activator of IFN-regulatory factors; DNA-dependent activator of IRFs; DNA-dependent activator of interferon regulatory factors; tumor stroma and activated macrophage protein DLM-1 |
| UniProt Protein Name             | Z-DNA-binding protein 1                                                                                                                                                                                                    |
| UniProt Gene Name                | ZBP1                                                                                                                                                                                                                       |
| UniProt Synonym Gene Names       | C20orf183; DLM1                                                                                                                                                                                                            |
| UniProt Entry Name               | ZBP1_HUMAN                                                                                                                                                                                                                 |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.