

Adenosine deaminase Monoclonal Antibodies

ORDERING INFORMATION

| Catalog No. | Clone No. | MAb Subtype | Size |
|-------------|-----------|-------------|-------|
| 13903 | 1F5-2G6 | IgG1 | 100ug |
| 13904 | 2C9-1B4 | IgG1 | 100ug |
| 13905 | 2F5-1D3 | IgG1 | 100ug |

Format: Protein G-purified antibody in PBS, pH 7.4.

BACKGROUND

Adenosine deaminase (ADA) is a purine catabolic enzyme which irreversibly deaminates adenosine and deoxyadenosine. It is needed for the breakdown of adenosine from food and for the turnover of nucleic acids in tissues. ADA deficiency (due to mutations in the *ADA* gene) results in severe combined immunodeficiency (SCID) as a result of accumulation of deoxyadenosine which, in turn, leads to (1) a buildup of dATP which inhibits ribonucleotide reductase and prevents DNA synthesis; since developing T cells and B cells are some of the most mitotically active cells, they are highly susceptible to this condition, and (2) an increase in S-adenosylhomocysteine since ADA is important in the purine salvage pathway; both substances are toxic to immature lymphocytes, which thus fail to mature.

SPECIFICATION SUMMARY

Antigen: Native ADA purified from calf spleen and recombinant human ADA.

Host Species: Mouse

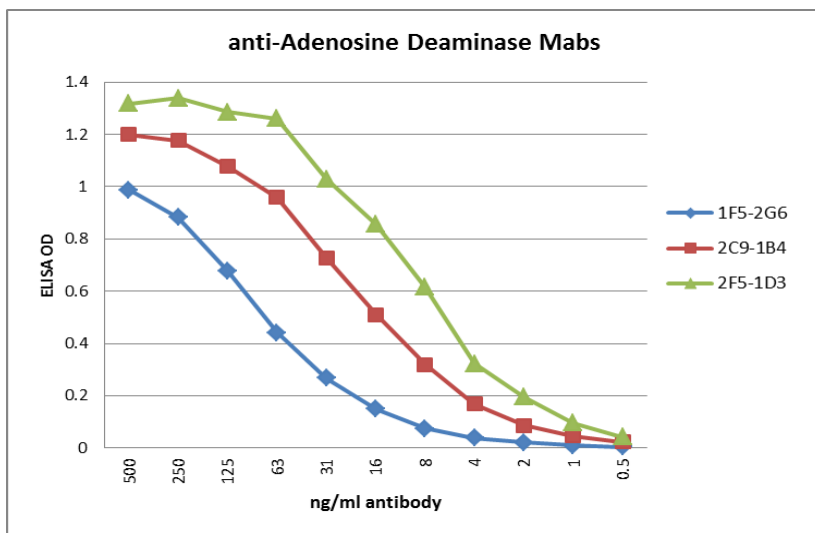
Gene ID: 100

Accession No.: P00813

Specificity: Native and recombinant ADA.

APPLICATIONS

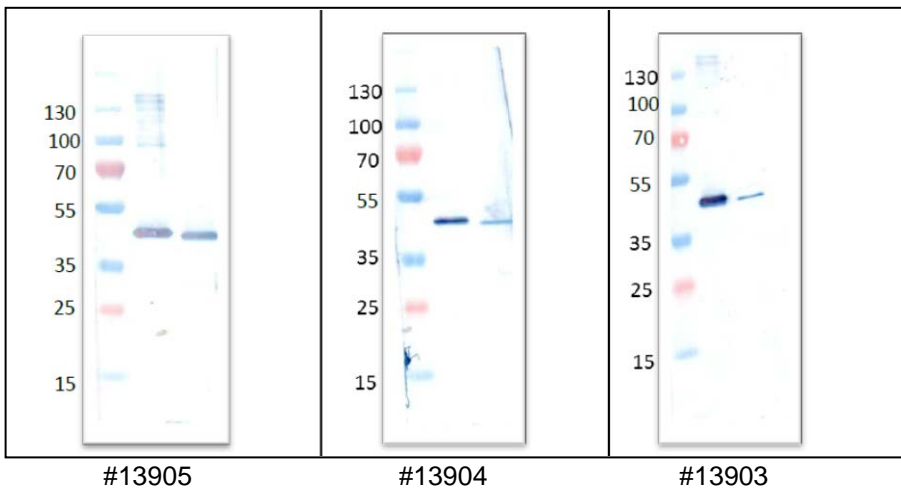
ELISA: Recombinant human ADA coated on the solid phase at 0.5ug/ml.



Adenosine deaminase Monoclonal Antibodies

APPLICATIONS (continued)

Immunoblotting: use at 200ng/ml. A band of ~38kDa is detected.



Lane 1: mw markers; Lane 2: recombinant human ADA; Lane 3: calf spleen ADA

These are recommended concentrations. Endusers should determine optimal concentrations for their applications.

DILUTION INSTRUCTIONS

Dilute in PBS or medium that is identical to that used in the assay system.

STORAGE AND STABILITY

These antibodies are stable for at least one (1) year at -20°C. Store in appropriate aliquots to avoid multiple freeze-thaw cycles.

For in vitro investigational use only. Not intended for use in therapeutic or diagnostic procedures.