

Monoclonal anti-human ASNA1 antibody (clone AT2A1)

Mouse IgG_{2b}, κ

Cat. No. IBATGA0293

Immunogen: Recombinant human ASNA1 (1-348aa) purified from *E. coli*

NCBI Accession No.: NP_004308

Isotype: Mouse IgG_{2b} heavy chain and κ light chain

Clone: Anti-human ASNA1 mAb, clone AT2A1, is derived from hybridization of mouse F0 myeloma cells with spleen cells from BALB/c mice immunized with a recombinant human ASNA1 protein.

Description: ASNA1, also as known as ARSA and TRC40, is the human homolog of the bacterial *arsA*, a member of the ATPase superfamily. *ArsA* and *ArsB* have been postulated to form a membrane complex which functions as an anion-translocating. It recognizes and selectively binds the transmembrane domain of TA proteins in the cytosol. This complex then targets to the endoplasmic reticulum by membrane-bound receptors, where the tail-anchored protein is released for insertion. This process is regulated by ATP binding and hydrolysis. *ArsA* hydrolyses ATP in the presence of its anionic substrate antimonite and produces resistance to arsenite and antimonite. The active form of *ArsA* is a homodimer with four nucleotide binding sites, two from each monomer.

Concentration: 1 mg/ml

Form: Liquid. In Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% Glycerol

Storage: Can be stored at +4C. For long term storage, aliquot and store at -20C. Avoid repeated freezing and thawing cycles.

Usage: The antibody has been tested by ELISA, Western blot analysis, Flow cytometry and ICC/IF to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

Application: ELISA, WB, Flow cytometry, ICC/IF

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



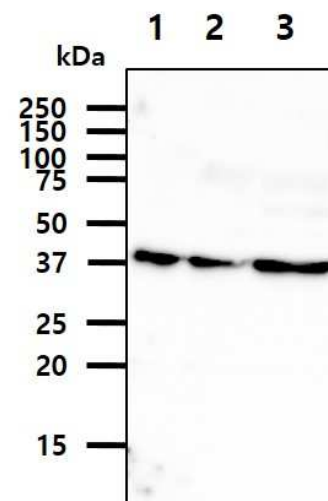
Manufactured for:
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Product information

Western blot analysis

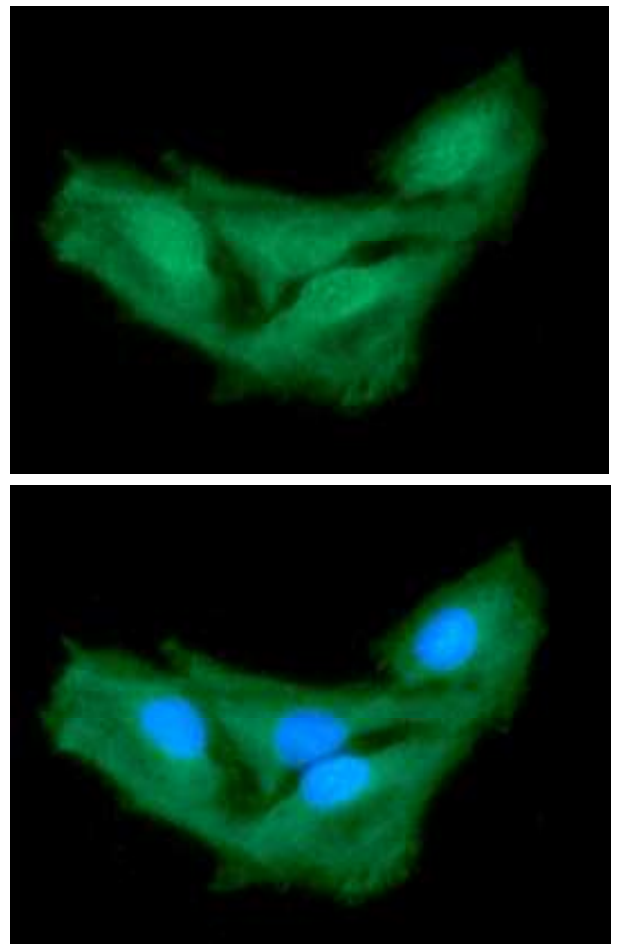
The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human ASNA1 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Lane 1.: HeLa cell lysate
Lane 2.: 293T cell lysate
Lane 3.: MCF7 cell lysate



ICC/IF analysis

ICC/IF analysis of ASNA1 in HeLa cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human ASNA1 antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).

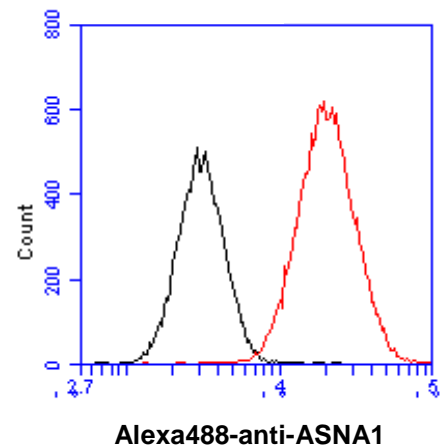


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Product information

Flow cytometry

Flow cytometry analysis of ASNA1 in HeLa cell line, staining at 2-5ug for 1×10^6 cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).



General references: Ota T and Suzuki Y. (2004) *Nat genet.* **36**(1): 40-5
Kurdi-Haidar B.. (1996) *Genomics.* **36**(3): 486-91
Stefanovic S. (2007) *Cell.* **128**(6): 1147-59

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