TDAG51 (RN-6E2): sc-23866

BACKGROUND
Cytotoxic T lymphocyte (CTL)-mediated cytotoxicity constitutes an important component of specific effector mechanisms in immunosurveillance against virus-infected or -transformed cells. Two mechanisms appear to account for this activity, one of which is the perforin-based process. Independently, a FAS-based mechanism involves the transducing molecule FAS (APO-1) and its ligand (FAS-L). The human FAS (APO-1) protein is a cell surface glycoprotein that belongs to a family of receptors that includes CD40, nerve growth factor receptors and tumor necrosis factor receptors. The FAS antigen is expressed on a broad range of lymphoid cell lines and is expressed at high levels in T cells subsequent to crosslinking of the T cell receptor (TCR). A previously undescribed protein, TDAG51, restores activation-induced apoptosis in cells that have lost the ability to display Fas in response to activation. Thus, TDAG51 plays a critical role in T cell apoptosis by coupling TCR stimulation to Fas expression.

CHROMOSOMAL LOCATION
Genetic locus: PHLDA1 (human) mapping to 12q21.2; Phlda1 (mouse) mapping to D11. Cytogenetic locus: 12q21.2; Phlda1 (mouse) mapping to 11D1.

SOURCE
TDAG51 (RN-6E2) is a mouse monoclonal antibody raised against TDAG51 of human origin.

PRODUCT
Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS
TDAG51 (RN-6E2) is recommended for detection of TDAG51 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

SELECT PRODUCT CITATIONS
4. Kastrati, I., et al. 2015. PHLDA1 expression is controlled by an estrogen receptor-NFκB-miR-181 regulatory loop and is essential for formation of ERα mammospheres Onco gene 34: 2308-2316.

RESEARCH USE
For research use only, not for use in diagnostic procedures.

DATA
Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

STORAGE
TDAG51 (RN-6E2): sc-23866. Western blot analysis of TDAG51 expression in non-transfected 293T: sc-11753 (A), mouse TDAG51 transfected 293T: sc-123964 (B), RT-4 (C), U-87 MG (D) and GB (E) whole cell lysates. Detection reagent used: m-IgG2a BP-HRP: sc-542731.

TDAG51 (RN-6E2): sc-23866. Immunofluorescence staining of methanol-fixed Hep G2 cells showing membrane localization (A); Immunoperoxidase staining of formalin fixed, paraffin-embedded human esophagus tissue showing cytoplasmic staining of basal squamous epithelial cells (B).