

## ORDERING INFORMATION

**Catalog Number:** AF4985

**Lot Number:** CBEI01

**Size:** 100 µg

**Formulation:** 0.2 µm filtered solution in PBS with 5% trehalose

**Storage:** -20° C

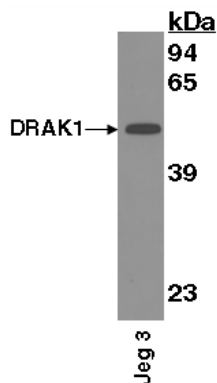
**Reconstitution:** sterile PBS

**Specificity:** human DRAK1

**Immunogen:** *E. coli*-derived rhDRAK1 (aa 115 - 313)

**Ig Type:** goat IgG

**Applications:** Western blot  
Direct ELISA



### Detection of DRAK1 with AF4985.

Cell lysate was resolved by SDS-PAGE, transferred to an Immobilon-P membrane and immunoblotted with 1.0 µg/mL goat anti-hDRAK1.

## Background

DRAK1 (DAP kinase-related apoptosis-inducing protein kinase 1; also STK17A) is a 55 kDa member of the DAP kinase subfamily, CAMK Ser/Thr protein kinase family of enzymes. It is expressed in osteoclasts, resides in the nucleus and initiates apoptosis. Human DRAK1 is 414 amino acids (aa) in length. It contains an N-terminal polyPro segment (aa 33 - 37) followed by a Ser/Thr kinase domain (aa 64 - 321) with a catalytic loop (aa 184 - 193). Apoptosis apparently requires an intact kinase domain. No rodent DRAK1 has been reported. Over aa 115 - 313, human DRAK1 is 95% aa identical to canine DRAK1, and 65% aa identical to human DRAK2.

## Preparation

Produced in goats immunized with purified, *E. coli*-derived, recombinant human DRAK1 (rhDRAK1; aa 115 - 313; Accession # Q9UEE5). Human DRAK1 specific IgG was purified by human DRAK1 affinity chromatography.

## Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

## Reconstitution

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 0.2 mg/mL.

## Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

## Specificity

This antibody has been selected for its ability to recognize human DRAK1 in direct ELISAs and Western blots.

## Applications

**Western blot** - An antibody concentration of 1.0 µg/mL is recommended.

**Direct ELISA** - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human DRAK1. The detection limit for rhDRAK1 is approximately 0.5 ng/well. In this format, approximately 10% cross-reactivity is observed with rhDRAK2.

**Optimal dilutions should be determined by each laboratory for each application.**