

# RHBDD1 Antibody

*RHBDD1: Rhomboid domain containing 1*

**CATALOG No.:** 5525

## BACKGROUND:

The Rhomboid family of proteins is made up of several widely conserved polytopic membrane serine proteases that play roles in growth and development (1). RHBDD1 is highly expressed in the testis and is involved in the cleavage of BIK, a proapoptotic member of the Bcl-2 family (2). Overexpression or suppression by RNAi of RHBDD1 in 293 cells will reduce or enhance BIK-mediated apoptosis, respectively, demonstrating that RHBDD1 modulates BIK-mediated apoptotic activity. In GC-1 cells, a spermatogonia cell line that can differentiate into spermatids within the seminiferous tubules, suppression of RHBDD1 expression by RNAi caused the cells to lose the ability to survive and differentiate in mouse seminiferous tubules, suggesting that RHBDD1 may be associated with mammalian spermatogenesis (3).

## SOURCE:

Rabbit polyclonal RHBDD1 antibody was raised against a 14 amino acid peptide from near the carboxy terminus of human RHBDD1 (GenBank accession no. AAI01265).

## STORAGE:

The RHBDD1 antibody is supplied as immunoaffinity chromatography purified IgG in PBS containing 0.02% sodium azide. Store at 4°C; stable for one year.

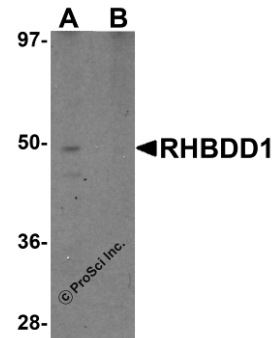
## APPLICATION:

RHBDD1 antibody can be used for detection of RHBDD1 by Western blot at 1 - 2 µg/ml. K562 cell lysate can be used as positive control.

## SPECIFICITY:

This antibody is specific for RHBDD1 and will not cross-react with other RHBDD family members. RHBDD1 antibody is human and mouse reactive.

**For research use only.**



Western blot analysis of RHBDD1 in K562 cell lysate with RHBDD1 antibody at 1 µg/ml in (A) the absence and (B) the presence of blocking peptide.

## RELATED PRODUCTS:

Blocking Peptide: Catalog No. **5525P**  
K562 Cell Lysate, Catalog No. **1204**  
RHBDD2 Antibody, Catalog No. **5527**  
RHBDD3 Antibody, Catalog No. **5529**  
BIK Antibody, Catalog No. **3819**  
Bcl-2 Antibody (NT), Catalog No. **3335**

## REFERENCES:

1. Koonin EV, Makarova KS, Rogozin IB, et al. The rhomboids: a nearly ubiquitous family of intramembrane serine proteases that probably evolved by multiple horizontal gene transfers. *Genome Biol.* 2003; 4:R19.
2. Wang Y, Guan X, Fok KL, et al. A novel member of the rhomboid family, RHBDD1, regulates BIK-mediated apoptosis. *Cell Mol. Life Sci.* 2008; 65:3822-9.
3. Wang Y, Song W, Li S, et al. GC-1 mRHBDD1 knockdown spermatogonia cells lose their spermatogenic capacity in mouse seminiferous tubules. *BNC Cell Biol.* 2009; 10:25.