

Store at
-20C
#12454**VDAC (D73D12) Rabbit mAb (HRP Conjugate)**
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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R Mk	Endogenous	32	Rabbit IgG	#P21796	7416

Product Usage Information**Application**

Western Blotting

Dilution

1:1000

StorageSupplied in 140 mM NaCl, 3 mM KCl, 10 mM sodium phosphate (pH 7.4) dibasic, 2 mM potassium phosphate monobasic, 2 mg/mL BSA, and 50% glycerol. Store at -20°C. *Do not aliquot the antibody.***Specificity/Sensitivity**

VDAC (D73D12) Rabbit mAb (HRP Conjugate) detects endogenous levels of total VDAC protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the amino terminus of human VDAC-1 protein.

Description

This Cell Signaling Technology antibody is conjugated to the carbohydrate groups of horseradish peroxidase (HRP) via its amine groups. The HRP conjugated antibody is expected to exhibit the same species cross-reactivity as the unconjugated VDAC (D73D12) Rabbit mAb #4661.

Background

Voltage-dependent anion channel (VDAC), ubiquitously expressed and located in the outer mitochondrial membrane, is generally thought to be the primary means by which metabolites diffuse in and out of the mitochondria (1). In addition, this channel plays a role in apoptotic signaling. The change in mitochondrial permeability characteristic of apoptosis is mediated by Bcl-2 family proteins, which bind to VDAC, altering the channel kinetics (2). Homodimerization of VDAC may be a mechanism for changing mitochondrial permeability and supporting release of cytochrome c (3). In mammalian cells, there are three VDAC isoforms, VDAC1, which is the most widely expressed isoform, as well as VDAC2 and VDAC3 (4,5).

Background References

- Hodge, T. and Colombini, M. (1997) *J Membr Biol* 157, 271-9.
- Shimizu, S. et al. (1999) *Nature* 399, 483-7.
- Zheng, Y. et al. (2004) *Oncogene* 23, 1239-47.
- Craigden, W.J. and Graham, B.H. (2008) *J Bioenerg Biomembr* 40, 207-12.
- Yamamoto, T. et al. (2006) *J Proteome Res* 5, 3336-44.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.**Applications Key****W:** Western Blotting**Cross-Reactivity Key****H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey**Trademarks and Patents**

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