

Store at
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#26768

Parthanatos Antibody Sampler Kit



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1 Kit (4 x 20 microliters)

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For Research Use Only. Not for Use in Diagnostic Procedures.

Product Includes	Product #	Quantity	Mol. Wt	Isotype/Source
PARP (46D11) Rabbit mAb	9532	20 µl	116, 89 kDa	Rabbit
AIF (D39D2) XP® Rabbit mAb	5318	20 µl	67 kDa	Rabbit IgG
MIF (E8S8H) Rabbit mAb	75038	20 µl	12 kDa	Rabbit IgG
Anti-rabbit IgG, HRP-linked Antibody	7074	100 µl		Goat
Poly/Mono-ADP Ribose (D9P7Z) Rabbit mAb	89190	20 µl		Rabbit IgG

Please visit cellsignal.com for individual component applications, species cross-reactivity, dilutions, protocols, and additional product information.

Description

The Parthanatos Antibody Sampler Kit provides an economical means of detecting the activation of parthanatos. The kit includes enough antibodies to perform two western blot experiments with each primary antibody.

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/mL BSA, 50% glycerol, and less than 0.02% sodium azide. Store at -20°C. *Do not aliquot the antibodies.*

Background

Parthanatos is a form of regulated cell death that follows a multistep cascade and is triggered by the accumulation of poly (ADP-ribose) (PAR). When PAR polymerase-1 (PARP-1) is overactivated under certain conditions, excessive PAR is produced and binds to apoptosis-inducing factor (AIF). As a result, AIF is released from the mitochondria and forms a complex with macrophage migration inhibitory factor (MIF). Subsequently, the AIF/MIF complex is translocated to the nucleus where MIF cleaves genomic DNA into large fragments, and cell death follows (1-3). Studies have found that parthanatos is involved in the pathogenesis of many diseases, particularly neurodegenerative disorders, such as Alzheimer's disease, Huntington's disease, Parkinson's disease, and amyotrophic lateral sclerosis (ALS) (4-7).

Background References

1. Fatokun, A.A. et al. (2014) *Br J Pharmacol* 171, 2000-16.
2. Wang, Y. et al. (2016) *Science* 354, aad6872. doi: 10.1126/science.aad6872.
3. Liu, L. et al. (2022) *Cell Mol Life Sci* 79, 60.
4. Park, H. et al. (2020) *Int Rev Cell Mol Biol* 353, 1-29.
5. Wang, X. and Ge, P. (2020) *Neuroscience* 449, 241-250.
6. Zhou, Y. et al. (2021) *Pharmacol Res* 163, 105299.
7. Thapa, K. et al. (2021) *Life Sci* 267, 118975.

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