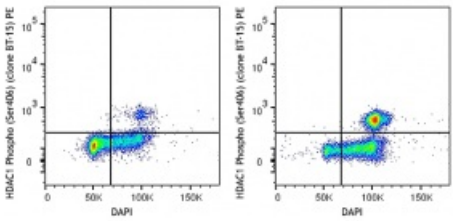
SONY

Product Data Sheet

PE anti-HDAC1 Phospho (Ser406)

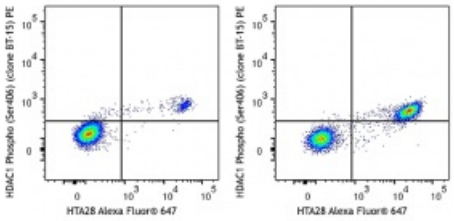
Catalog # / Size:	3655015 / 25 tests 3655020 / 100 tests
Clone:	BT-15
Isotype:	Mouse IgG2b, κ
Immunogen:	Synthetic peptide corresponding to human HDAC1 phosphorylated at Serine 406
Reactivity:	Human, Other
Preparation:	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).
Concentration:	Lot-specific



Untreated HeLa cells (left) and HeLa cells treated with Nocodazole for 24 hours (right), were fixed, permeabilized with True-Phos™ Perm Buffer, and then stained with anti-HDAC1 Phospho (Ser406) Antibody (clone BT-15) PE and DAPI.

Applications:

Applications:	Intracellular Flow Cytometry
Recommended Usage:	Each lot of this antibody is quality control tested by intracellular flow cytometry using our True-Phos™ Perm Buffer in Cell Suspensions Protocol. For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.
Application Notes:	When tested for western blot, this clone produced a band that showed a ~1-3 kD mass shift compared to a pan HDAC1 antibody. This observation is consistent with a previous study of the HDAC1 Phospho (Ser406) site. This clone recognizes zebrafish HDAC1 phosphorylated at Ser406[2].



Untreated HELA cells (left) and HELA cells treated with Nocodazole for 24 hours (right), were fixed, permeabilized with True-Phos™ Perm Buffer, and then stained with anti-HDAC1 Phospho (Ser406) Antibody (clone BT-15) PE and anti-Histone H3-Phosphorylated (Ser28) Antibody (clone HTA28) Alexa Fluor® 647.

Application References:

1. Segre CV, *et al*, 2016. *mAbs.* 8: 37-42
2. Loponte S, *et al*, 2016. *Sci Rep*, 6: 30213.

Sony Biotechnology Inc. 1730 North First Street, San Jose, CA 95112 www.sonybiotechnology.com

Description: Histone Deacetylase 1 (HDAC1) plays a critical role in various cellular processes, including cell cycle progression, proliferation, and differentiation. The enzyme functions by removing acetyl moieties from histone targets, resulting in histone compaction and alterations in nucleosomal positioning. Aurora kinases phosphorylate HDAC1 at Ser406 during prophase, immediately after cells begin mitosis, resulting in reduced deacetylase activity of HDAC1. This modification plays an essential role in regulating cell cycle progression, as well as controlling the expression of genes involved in central nervous system development.

Antigen References:

1. Segre CV, *et al*, 2016. *mAbs.* 8: 37-42.
2. Loponte S, *et al*, 2016. *Sci Rep*, 6: 30213.