

HDAC6 Conjugated Antibody

Catalog No: #C32406



Package Size: #C32406-AF350 100ul #C32406-AF405 100ul #C32406-AF488 100ul
 #C32406-AF555 100ul #C32406-AF594 100ul #C32406-AF647 100ul
 #C32406-AF680 100ul #C32406-AF750 100ul #C32406-Biotin 100ul

Orders: order@signalwayantibody.com
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Description

Product Name	HDAC6 Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of total HDAC6 protein.
Immunogen Description	Recombinant protein of human HDAC6.
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	FLJ16239;HD6;JM21
Accession No.	Swiss-Prot#:Q9UBN7NCBI Gene ID:10013
Uniprot	Q9UBN7
GeneID	10013;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Calculated MW	131
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

Product Description

Antibodies were purified by affinity purification using immunogen.

Background

HDAC6 is a class II histone deacetylase enzyme localized to the cytoplasm and associated with the microtubule network (1). It is involved in the regulation of many cellular processes, including cell migration, immune synapse formation, viral infection, and degradation of misfolded proteins (1). HDAC6 contains two tandem catalytic domains that facilitate the deacetylation of multiple protein substrates, including histones and non-histone proteins such as tubulin, cortactin, and HSP90. Despite the ability to deacetylate histone proteins *in vitro*, there is no evidence for HDAC6-mediated deacetylation of histones *in vivo* (2,3). The acetylation/deacetylation of tubulin on Lys40 regulates binding and motility of the kinesin-1 motor protein and subsequent transport of cargo proteins such as JNK-interacting protein 1 (JIP1) (4). The acetylation/deacetylation of cortactin regulates cell motility by modulating the binding of cortactin to F-actin (5). Acetylation/deacetylation of HSP90 modulates chaperone complex activity by regulating the binding of an essential cochaperone protein, p23 (6,7). In addition to its role as a protein deacetylase, HDAC6 functions as a component of the aggresome, a proteinaceous inclusion body that forms in response to an accumulation of misfolded or partially denatured proteins (8). Formation of the aggresome is a protective response that sequesters cytotoxic protein aggregates for eventual autophagic clearance from the cell. HDAC6 contains a zinc finger ubiquitin-binding domain that binds both mono- and poly-ubiquitinated proteins (8). HDAC6 binds to both poly-ubiquitinated misfolded proteins and dynein motors, facilitating the transport of misfolded proteins to the aggresome (9,10). HDAC6 is also required for subsequent recruitment of the autophagic machinery and clearance of aggresomes from the cell (11). Thus, HDAC6 plays a key role in the protection against the deleterious effects of pathological protein aggregation that occurs in various diseases, such as neurodegenerative Huntington's disease (11).

Note: This product is for *in vitro* research use only