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Universal Loading Control Antibody Cocktail

Cat #: KTD101-EN Size: 1 kit

	Product Name: Universal Loading Control Antibody Cocktail		
REF	**Catalog Number:** KTD101-EN	LOT	**Lot Number:** Refer to product label
	Reactivity: Human, Mouse, Rat		**Applications:** WB
	Storage: Store according to the recommended storage conditions of each component, stable for 12 months from date of shipment		**Note:** Storing according to the recommended storage conditions after the package is opened

Product Application

Assay principle: At least two factors need to be considered for the loading control antibodies chosen in the WB experiment: the experimental system and the sample to be tested. It is well known that loading control proteins are widely and stably expressed at high levels in almost tissues and cells, which can be used as a standard for semi-quantitative analysis. On the other hand, there are some uncertainties in the extraction and preparation of the sample to be tested, so it is also necessary to select an appropriate total protein as a positive control for the sample to be tested in WB experiments. The Universal Loading Control Antibody Cocktail is specially designed for WB experiments and provides a suitable loading control product solution. The cocktail contains: ①Three most commonly used loading control antibodies of classic GAPDH, β-Actin and β-Tubulin quoted from hundreds of citations, which can be used for samples of common species including human, mice, rat, etc., are widely used as loading control in different sample type and molecular weight; ②A ready-to-use WB positive control, which can be directly loaded to provide a real WB experimental reference; ③SuperKine™ Enhanced Antibody Dilution Buffer can enhance the WB target band signal, eliminate background interference and make WB experiments easier. The cocktail set has been optimized to achieve the best results. The components in the set (A01020, A01010, A01030, BMU103-EN) can also be ordered separately.

Component Cat	Component name	Size	Application	storage condition
A01020-SK	Anti-GAPDH Mouse Monoclonal Antibody (2B5)	60 μL*1 Tube	Observed band 37 kD, Widely used	-20℃
A01010-SK	Anti-β-Actin Mouse Monoclonal Antibody (1C7)	60 μL*1 Tube	Observed band 43 kD, widely used	-20℃
A01030-SK	Anti-β-Tubulin Mouse Monoclonal Antibody (3G6)	60 μL*1 Tube	Observed band 55 kD, widely used	-20℃
BMP1002-SK	WB Positive Control	100 μL*1 Tube	ready to use	-20℃
BMU103-SK	SuperKine™ Enhanced Antibody Dilution Buffer	50 mL*2 Bottle	ready to use, raise the signal and lower the background	4℃

Kit Application:

1. The recommended dilution ratio of the three antibodies is 1:1000-1:10000 (optimal 1:2000). The choice of internal reference antibody should ensure that the molecular weight difference between the target protein and the internal reference protein is more than 5 KD, and the internal reference protein in the sample is highly expressed and is not affected by experimental variables. Contains stabilizers, preservatives and glycerin. It is recommended to store at -20°C for a long time after being subpackaged.
2. The WB positive control is a ready-to-use reagent. It can be directly used for SDS-PAGE loading as a positive control in WB experiments. The recommended loading volume is 5-10 μL. Contains glycerin, it is recommended to store at -20°C for a long time after being subpackaged.
3. SuperKine™ Enhanced Antibody Dilution is a ready-to-use reagent that can be directly used for the dilution and preparation of various primary or secondary antibodies to enhance the signal of the WB target protein and reduce the background signal. After the antibody incubation, the diluted antibody should be stored at 4°C immediately for subsequent reuse.

Highlight moment: The loading control antibodies are not only related to the species of the sample to be tested, but also related to the location of the target protein. It is suggested to choose nuclear internal controls like PCNA (A01040) or Histone H3 (A01070) for nuclear-related proteins, and use mitochondrial internal controls like COX IV (A01060) for mitochondrial proteins. In addition to enhanced antibody diluents, enhanced/hypersensitive ECL substrates (BMU101-EN/BMU102-EN) are also the first choice for perfect WB experiments. Scan the QR code on the right to view more Abbkine product information.

Experimental results display:

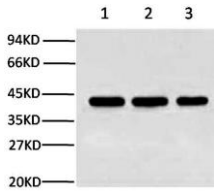

Fig. Western blot analysis of β-Actin expression in Rat brain (lane 1), HeLa cell lysate (lane 2), Mouse brain (lane 3), with Anti-β-Actin mouse monoclonal antibody (1C7) (A01010, 1:2000), the secondary antibody is HRP, Goat Anti-Mouse IgG (A21010, 1:10000).

Precautions:

1. Do not mix components of different batch numbers and different manufacturers; otherwise, it may cause abnormal results.
2. If non-specific bands interfere with the experiment, you can try to appropriately reduce the amount of protein loaded, reduce the concentration of the primary antibody and the secondary antibody, or shorten the exposure time.
3. The products have passed strict quality inspections. Welcome to contact us at any time, we are committed to customer success and customer satisfaction.

References:

[1] Inhibition of Sema4D/PlexinB1 signaling alleviates vascular dysfunction in diabetic retinopathy. EMBO Mol Med (2020)12:e10154
[2] Distribution and Dynamic Changes in Matrix Metalloproteinase (MMP)-2, MMP-9, and Collagen in an In Stent Restenosis Process. European Journal of Vascular and Endovascular Surgery, Volume 61, Issue 4, April 2021, Pages 656
[3] Circulating IGF-1 promotes prostate adenocarcinoma via FOXO3A/BIM signaling in a double-transgenic mouse model. Oncogene volume 38, pages6338–6353(2019)

Recommended Products:

Other loading control antibodies		
Catalog No	Product Name	Features
A01070	Anti-Histone H3 Mouse Monoclonal Antibody (2D10)	loading control for nucleus
A01050	Anti-Plant Actin Mouse Monoclonal Antibody (3T3)	loading controls for plant samples
A01110	Anti-Rubisco (Large Chain) Monoclonal Antibody (9Y6))	loading controls for plant samples
A01060	Anti-COX IV Mouse Monoclonal Antibody (14Y2)	loading controls for mitochondrial
Related Products		
BMU101-EN	SuperKine™ West Pico PLUS Chemiluminescent Substrate	Sensitive, efficient, stable signal
BMU102-EN	SuperKine™ West Femto Maximum Sensitivity Substrate	Sensitive, efficient, stable signal
KTP3006	ExKine™ Total Protein Extraction Kit	Conditions are mild, the operation is simple and efficient
A21010	HRP, Goat Anti-Mouse IgG	High cost performance, stable properties
BMP1001	Protease Inhibitor Cocktail (100X)	Complete function, wide application

Disclaimer: The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.