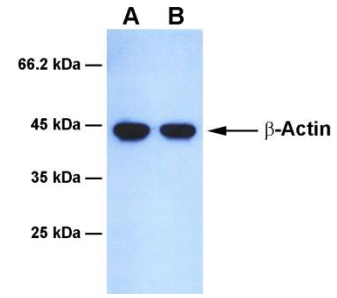
Lanleys™ Biotechnologies Laboratory

β-Actin (9G8)	
Catalogue #	Mab2011

Data



Western blot (WB): HT-1080 (A) and NIH/3T3 (B) cell extracts prepared in 1% Triton-X lysis buffer.

Product Information

Gene Symbol:	ACTB (Human)
Molecular Weight:	42 kDa (β-actin)
Source:	This is a mouse monoclonal antibody raised against the full-length β-actin of human origin.
Clone #:	9G8
Isotype:	IgG_1
Specificity:	This antibody detects β-actin of human and mouse origins. Other species have not been tested in house.
Physical Form:	Freeze-dried powder from 1 × PBS solution, or cell culture media with 0.02% NaN_3
Application:	• Western blotting (WB, dilution range: 1:1,000 – 10,000) • Other applications have not been tested in house.
Storage:	Store freeze-dried powder at 4°C upon arrival. When ready to use, rehydrate with 0.1 ml or desired volume of distilled H_2O and centrifuge if not clear. For long-term storage, make aliquots and keep them at -20°C or below. Avoid repeated freezing and thawing cycles.

Background

Actin is found in nearly all eukaryotic cells, which often constitutes as much as 50% of total cellular protein. It is also one of the most highly conserved proteins, differing by less than 20% among species. In vertebrates, three main groups of actin isoforms, α, β and γ have been identified. The α-actin is a major constituent of the contractile apparatus in muscle tissues. The β- and γ- actins co-exist in most cell types as components of cytoskeleton, and as mediators of internal cell motility. Thus, actin participates in many important cellular processes including muscle contraction, cell motility, cell division and cytokinesis, vesicle and organelle movements, cell signaling, and the establishment and maintenance of cell junctions and cell shape.

Important Note

This product is intended for research use only, not for use in human therapeutic or diagnostic procedures.