

Loading Controls









Loading control antibodies are useful to ensure that an even amount of protein has been loaded across the gel. The targets selected as loading control markers are usually housekeeping proteins expressed at high levels in a wide range of cell lines and tissues.

PrecisA Monoclonals Loading Controls

The Loading Control Panel consists of PrecisA mouse monoclonal antibodies targeting selected proteins that are constitutively expressed in a large set of cell lines and tissues. The antibodies are all characterized in four separate human cell lines (HeLa, HEK-293, A-431, Hep-G2) and two rodent cell lines (NIH-3T3 (mouse), NBT-II (rat)) and covers targets with MW ~15-100kDa.

The antibodies are developed using a unique antigen design and are epitope mapped to define specificity. Furthermore, all of the panel members have been genetically validated for use in WB through the siRNA knock down technique to confirm target specificity.

Multiplexing

Our Loading Control Panel works well for fluorescence-based multiplex Western blotting, which is a time-saving alternative to chemiluminescent detection. For multiplexing, choose a loading control antibody of a different isotype than the antibody targeting the protein of interest (when using mouse monoclonals) or simply combine any panel member with one of our rabbit Triple A Polyclonals. With suitable secondary antibodies conjugated to fluorescent dyes, the western blot protocol can be reduced to only one primary and one secondary incubation step and the two bands can be visualized in the same image.

The use of Loading Controls

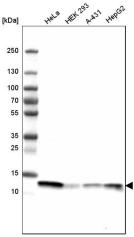
- Normalizing protein levels using a loading control antibody is necessary to get reliable data when studying expression of a target protein in different samples. The use of loading controls enables you to distinguish uneven sample loading from an actual difference in protein expression.
- Loading controls can also be used to confirm equal transfer of protein from the gel across the whole membrane. This is particularly useful when comparing protein expressions over several samples.
- When choosing a loading control antibody, be sure to pick one that targets a protein of a different molecular weight than your protein of interest. By doing so you can easily differentiate between the two bands during blotting.
- For optimal results, also check that the protein or RNA expression level of the loading control target is fairly high in the cell lines/ tissues that will be used.

All panel members belong to the PrecisA Monoclonals brand and have been developed under the same stringent conditions, ensuring secure continuity and stable supply.

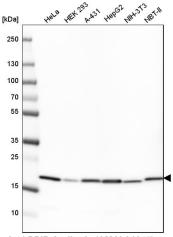
Cover image:

^{1.} Western blot analysis in human cell line HeLa, human cell line HEK 293, human cell line A-431, human cell line HepG2, mouse cell line NIH-3T3 and rat cell line NBT-II.

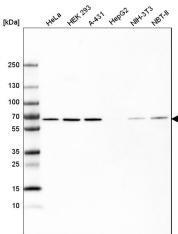
2. Western blot analysis of extracts from U-251 cells, transfected with either control siRNA (siRNA ctrl) or target specific siRNA probes (siRNA#1, siRNA#2), using Anti-PPIB monoclonal antibody. Downregulation of antibody signal confirms target specificity. Remaining % intensity, relative control lane, is indicated. Anti-GAPDH monoclonal antibody was used as loading control.



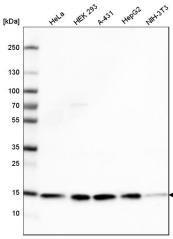
Anti-PFN1 Antibody (AMAb91181)
Applications: IHC, WB Isotype: IgG2a Reactivity: Human



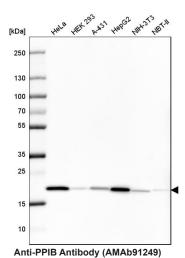
Anti-PPIB Antibody (AMAb91245) Applications: IHC, WB Isotype: IgG2a Reactivity: Human, Rat and Mouse



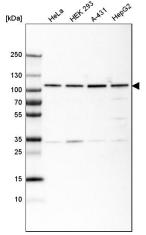
Anti-HDAC1 Antibody (AMAb90781) Applications: IHC, WB Isotype: IgG1 Reactivity: Human, Rat and Mouse



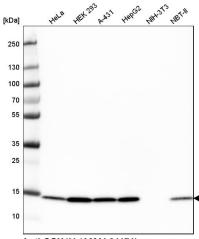
Anti-COX4I1 Antibody (AMAb91173) Applications: IHC, WB Isotype: IgG2a Reactivity: Human and Mouse



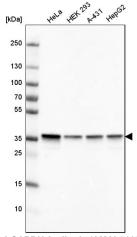
Applications: WB Isotype: IgG2b Reactivity: Human, Rat and Mouse



Anti-HSP90B1 Antibody (AMAb91019) Applications: IHC, WB, ICC-IF Isotype: IgG2b Reactivity: Human



Anti-COX4I1 (AMAb91171) Applications: IHC, WB Isotype: IgG1 Reactivity: Human and Rat



Anti-GAPDH Antibody (AMAb91153) Applications: IHC, WB Isotype: IgG2a Reactivity: Human

Figure 1-9

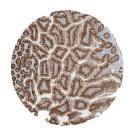
Lane 1: Marker

Lane 2: Human cell line HeLa Lane 3: Human cell line HEK 293 Lane 4: Human cell line A-431 Lane 5: Human cell line HepG2 Lane 6: Mouse cell line NIH-3T3 Lane 7: Rat cell line NBT-II











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Our website provides you with easy access to all characterization data, and online ordering via our web shop.

You can also send your order to order@atlasantibodies.com or send an e-mail to support@atlasantibodies.com to discuss any matters regarding use of antibodies.

You'll find we're Totally Human.

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