



V3 WESTERN WORKFLOW™ **Housekeeping Protein (HKP) Publications**

Research Papers on the Pitfalls of Using HKP as Loading Controls in Western Blots

Avoiding pitfalls of internal controls: validation of reference genes for analysis by qRT-PCR and western blot throughout rat retinal development.
Rocha-Martins M, Njaine B, Silveira MS (2012). PLoS One 7, e43028.

Using soybean trypsin inhibitor as an external loading control for western blot analysis of tear proteins: application to corneal disease.
You J, Hodge C, Wen L, McAvoy JW, Madigan MC, Sutton G (2012). Exp Eye Res 99, 55–62.

Stability of reference proteins in human placenta: general protein stains are the benchmark.
Lanoix D, St-Pierre J, Lacasse AA, Viau M, Lafond J, Vaillancourt C (2012). Placenta 33, 151–156.

Uncovering suitable reference proteins for expression studies in human adipose tissue with relevance to obesity.
Pérez-Pérez R, López JA, García-Santos E, Camafeita E, Gómez-Serrano M, Ortega-Delgado FJ, Ricart W, Fernández-Real JM, Peral B (2012). PLoS One 7, e30326.

Identification and validation of rice reference proteins for western blotting.
Li X, Bai H, Wang X, Li L, Cao Y, Wei J, Liu Y, Liu L, Gong X, Wu L, Liu S, Liu G (2011). J Exp Bot 62, 4763–4772.

Housekeeping genes: expression levels may change with density of cultured cells.
Greer S, Honeywell R, Geletu M, Arulanandam R, Raptis L (2010). J Immunol Methods 355, 76–79.

Absence of GAPDH regulation in tumor cells of different origin under hypoxic conditions in vitro.
Said HM, Polat B, Hagemann C, Anacker J, Flentje M, Vordermark D (2009). BMC Res Notes 2, 8.

Expression of four housekeeping proteins in elderly patients with schizophrenia.
Bauer DE, Haroutunian V, McCullumsmith RE, Meador-Woodruff JH (2009). J Neural Transm 116, 487–491.

Beta-tubulin is a more suitable internal control than beta-actin in western blot analysis of spinal cord tissues after traumatic injury.
Liu NK and Xu XM (2006). J Neurotrauma 12, 1794–1801.

Beta-actin is not a reliable loading control in western blot analysis.
Dittmer A and Dittmer J (2006). Electrophoresis 27, 2844–2845.

Housekeeping proteins: a preliminary study illustrating some limitations as useful references in protein expression studies.
Ferguson RE, Carroll HP, Harris A, Maher ER, Selby PJ, Banks RE (2005). Proteomics 5, 566–571.

Glyceraldehyde-3-phosphate dehydrogenase varies with age in glycolytic muscles of rats.
Lowe DA, Degens H, Chen KD, Alway SE (2000). J Gerontol A Biol Sci Med Sci 55, B160–164.

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