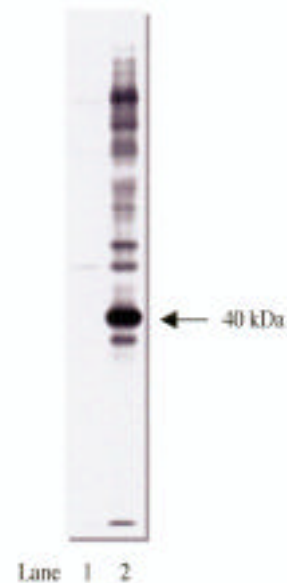


## Positive and Negative Controls for Western Blots

Cell Line/ tissue	Catalog#	Amount	Concentration
A431 cells	X1002	100 ul	500ug/ml
A431 (EGF-stimulated)	X1003	100 ul	500ug/ml
Normal Human fibroblast	X1004	100 ul	500ug/ml
3T3 cells	X1005	100 ul	500ug/ml
RSV-transformed 3T3 cells	X1006	100 ul	500ug/ml
Madin-Darby bovine kidney (MDBK) cells	X1007	100 ul	500ug/ml
PC12 (rat phaeochromocytoma) cells	X1008	100 ul	500ug/ml
Jurkat Cells	X1009	100 ul	500ug/ml
Rat brain	X1030	100 ul	500ug/ml
Rat Kidney	X1277	100 ul	500ug/ml
HeLa cells	X1278	100 ul	500ug/ml

Total cell lysates are useful as both positive and negative controls in immunoblotting. A431, a human epidermoid carcinoma cell line, and the EGF-stimulated A431 lysates are used as negative and positive controls, respectively, when studying the phosphorylation cascade initiated by ligand binding to receptor tyrosine kinases. Both A431 and normal human fibroblasts are valuable positive controls for antibodies to proteins expressed in these cells. The mouse fibroblast cell line 3T3 and its RSV-transformed counterpart serve as negative and positive controls, respectively, for antibodies to proteins that are phosphorylated as a result of transformation by RSV (Rous sarcoma virus). Madin-Darby bovine kidney (MDBK) cell lysate displays proteins expressed in bovine kidney and PC12 (rat phaeochromocytoma) cell lysate can be expected to mirror the protein expression of cells and tissues of neuroectodermal origin. Likewise, Jurkat cells express the proteins unique to human T-cells. Rat brain is a widely used positive control for those proteins that are exclusively expressed in brain. At right is an example of the use of positive and negative control lysates in western blotting.

The blot of 3T3 cell lysate (lane 1) and RSV-transformed 3T3 (lane 2) was probed with anti-phosphotyrosine peroxidase conjugate to reveal those proteins that are tyrosine-phosphorylated in response to transformation by Rous sarcoma virus.



**Form** All cell lysates are packaged at a protein concentration of ~ 500 ug/ml in Laemmli electrophoresis sample buffer. Samples need to be boiled for 3-5 minutes, before loading the gel.

**Suggested use:** A volume of 10-25ul is suggested for immunoblotting.

**Storage:** This product should be stored at -20 °C.

**For research use only. Not for use in human diagnostics or therapeutics.**