Azure TotalStain Q

WESTERN BLOT NORMALIZATION EVOLVED

Discovering uneven loading or transfer at the end of your experiment is time-consuming and frustrating. **Azure Biosystems' TotalStain Q** is the solution. This quantitative total protein stain allows you to **detect total protein first**, ensuring accurate results from the start.

Traditional WB Workflow

- Separate proteins on gel
- Transfer proteins to membrane
- Block membrane
- Probe for proteins of interest
- Normalize using housekeeping proteins

Normalizing at the end with housekeeping proteins sets labs up for days of wasted time and costly reagents if transfers are unsuccessful.

TotalStain Q WB Workflow

- Separate proteins on gel
- Transfer proteins to membrane
- Stain and detect total protein with TotalStain Q

Total protein detection with TotalStain Q at this point of the protocol allows users to verify transfer success and protein distribution before continuing with the Western Blot protocol

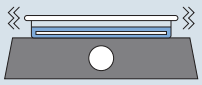
- Block membrane
- Probe for proteins of interest

TOTALSTAIN Q PROVIDES:

- ✓ Simple 20-minute protocol. Stain. Rinse. Image. No destain required.
- ✓ Wide linear dynamic range across lysates of various tissue types and protein loads
- ✓ Compatibility with both chemiluminescent and NIR fluorescent workflows
- ✓ Journal preferred normalization methodology*

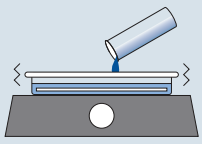
Easily integrate a total protein stain into existing immunoblotting protocols.
Image on any green channel fluorescent imager. No de-staining required.

1



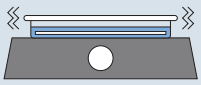
Rinse—After transfer 5-minute membrane rinse in water (10mL, gentle agitation)

2



Stain—5-minute TotalStain Q Staining Solution membrane incubation (10 mL, gentle agitation)

3



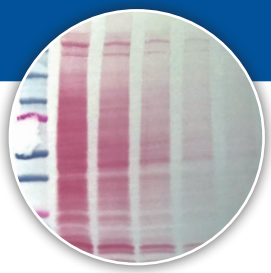
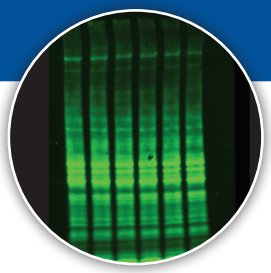
Wash—3 washing steps of the membrane of 3 minute each one in Working Washing Solution (10mL, gentle agitation)

4

Imaging—Image acquisition using digital imaging system at Cy3 Channel or Safe Dyes Channel

*Collecting and presenting data. (n.d.). Journal of Biological Chemistry.

Ponceau is fast, but not quantitative. HKP normalization is quantitative, but slow and cumbersome. TotalStain Q revolutionizes WB workflow by combining the best of both methods. TotalStain Q's fast protocol provides quantitative total protein detection in 20 minutes, detecting total protein at the beginning of the experiment, where it makes sense.

Housekeeping Proteins	Ponceau S	TotalStain Q
		
3+ hours protocol	5-minute protocol	20-minute protocol
Quantitative	Qualitative	Quantitative
No de-stain required	Requires de-staining	No de-stain required
Chemi and fluorescent compatible (stripping required for chemi)	Chemi and fluorescent compatible	Chemi and fluorescent compatible
Normalization protein detected at the end or alongside proteins of interest	Total protein detected before proteins of interest	Total protein detected before proteins of interest
High expression and expression variability limit dynamic range	Low sensitivity and limited dynamic range	High sensitivity and wide dynamic range

ORDERING INFORMATION

Part Number	Name	Description
AC2225	TotalStain Q (PVDF)	Fluorescent total protein stain for PVDF membranes
AC2227	TotalStain Q (NC)	Fluorescent total protein stain for nitrocellulose membranes

REQUEST A SAMPLE

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