

Nonfat dried milk powder

Product No. A0830

Description:

| | |
|----------------------------------------|------------------------|
| Synonym | Milk powder, Skim milk |
| HS-No. | 04021011 |
| EC-No. | 271-045-3 |
| Storage | RT |
| Specification | |
| Ash | 8.5 % ± 0.5 % |
| Total no. of germs | max. 30000 CFU/g |
| pH (20 %; H₂O; 20°C) | 6.5 ± 0.2 |
| Protein | 35.0 % ± 1.0 % |
| Fat | max. 1.0 % |
| Lactose | 52.0 % ± 1.0 % |

Intended Use:

For laboratory use only. Not for drug or household use.

Comment

Skim milk powder is used in various immuno assay buffers to block surfaces of the blot (Ref. 2, Chapter 12 p. 496).

It is also used to block nitrocellulose filters in the cDNA - cloning procedure (see, e.g. Ref 3 Chapter 4 Chapter B.15 or Ref. 12.7) referred to as 'BLOTTO' (Bovine Lacto Transfer Technique Optimizer, Ref 1): a 1X BLOTTO solution contains 5% skim milk powder in water with 0.02% sodium azide. The solution is stored at 4°C. For final concentration the solution is diluted 1: 25 with prehybridisation buffer solution. If the background is high, Nonidet P-40 will be added at a final concentration of 1%. Addition of SDS can lead to precipitation of milk proteins.

The use of skim milk is not recommended for Northern blot hybridizations (3).

References:

- (1) Johnson, D.A. *et al.* (1987) *Gene Anal. Techn.* **1**, 3-8
Improved technique utilizing nonfat dry milk for analysis of proteins and nucleic acids transferred to nitrocellulose.
- (2) Harlow, E., Lane, D. (eds.) (1988) *Antibodies A Laboratory Manual*; Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York.
- (3) Sambrook, J., Fritsch, E.F. & Maniatis, T. (1989) *Molecular Cloning: A Laboratory Manual*, 2nd Edition. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York.
- (4) Ausubel, F.A., Brent, R., Kingston, R.E., Moore, D.D., Seidman, J.G., Smith, J.A. & Struhl, K. (eds.) (1995) *Current Protocols in Molecular Biology*. Page 2.10.16 (Suppl. 42) Greene Publishing & Wiley-Interscience, New York.