VOLTage™ Fast SDS-PAGE Buffer (20x)

#GS31.0250 (250ml 20X)
(FOR RESEARCH ONLY)

Product: VOLTage™ Fast SDS-PAGE Electrophoresis Buffer is ideal for SDS-PAGE of proteins up to 250kDa. Simply replace the standard Laemmli Running Buffer (TGS) by VOLTage™ Fast SDS-PAGE Buffer (1x) and save considerable runtime just by running the gel under identical conditions. Typically, if one runs a mini-gel at 200V, migration time can be halved from an hour to 30 minutes.

Besides the faster runtime, other advantages of using VOLTage™ Fast SDS-PAGE Electrophoresis Buffer in comparison with Laemmli Running Buffer, include a wider separation range as well as a higher transfer efficiency in case of Western Blotting.

VOLTage™ Fast SDS-PAGE Electrophoresis Buffer has been developed for SDS-PAGE and is not suitable for Native-PAGE Gels. Moreover, it is meant for usage with hand-made gels. Running commercially available precast gels with VOLTage™ Fast SDS-PAGE Electrophoresis Buffer should be tested beforehand.

Applications: Fast SDS-PAGE of proteins up to 250kDa

Contents: #GS31.0250 contains 250ml of 20X concentrated VOLTage™ Fast SDS-PAGE Buffer

Properties: Time Saving
Better Separation
More Efficient Transfer

Storage: Store at room temperature for up to 2 years.

Prior to use:

VOLTage™ Fast SDS-PAGE Buffer is prepared with ultrapure water and 0.2µm filtered, and is provided as a 20X concentrated aqueous solution. The working concentration is 1X. Prepare 1L VOLTage™ Fast SDS-PAGE Buffer by mixing 50ml of the 20x concentrate with 950ml of ddH_2O.

Usage:

VOLTage™ Fast SDS-PAGE Buffer (1X) should be used in exactly the same way as Laemmli Running Buffer (TGS, Tris-Glycine SDS), except for the fact that the total runtime will be greatly reduced (40-60%). You can increase voltage without significant increase of buffer and gel temperature in comparison with Laemmli Running Buffer. VOLTage™ Fast SDS-PAGE Buffer can also be used in 2-D electrophoresis in a similar way as Laemmli Running Buffer with the same time reduction.

In comparison with Laemmli Running Buffer, separation of the lower weight bands will be significantly better. If one would like to have similar patterns, one should lower the acrylamide percentage with approximately 4%. So, an 8% VOLTage™ Fast SDS-PAGE results in a very similar pattern as a 12% SDS-PAGE using Laemmli Running Buffer. The lower acrylamide concentration then supports a more efficient protein transfer in subsequent Western Blotting.