Bio - Optica
Strumentazioni Scientifiche

PHOSPHOFRUCTOKINASE Stain
Lyophilized powder for histoenzymatic reaction
30 – 30117LY

IVD In-vitro diagnostic medical device CE

CND Code: W01030708

working solution volume ..... 10 ml
procedure time ..... 61 minutes
storage temperature ..... -20°C
complementary equipment ..... not requested

Expected aim

Product for the preparation of cyto-histological samples for optical microscopy.

Application

Cryostatic sections of 8 micron of human skeletal muscle.
To show PFK enzymatic activity. This procedure is used to determine if a glycogen-storage disease is due to a lack of PFK activity or about other enzymes necessary for the metabolism of glycogen

Method

1) Put restoration solution (reagent B) into lyophilized powder (reagent A).
2) Shake until dissolution.
3) Put the sections horizontally.
4) Cover the sections with right quantity of rehydrated PFK solution.
5) Incubate sections in the incubation box at 37°C — 60 minutes
6) Rinse in distilled water — 3 changes
7) Dehydrate in acetone 30, 60, 90%
8) Dehydrate in absolute ethanol, clear and mount.

Results

Positive PFK activity ..... Dark blue

Components

Components	CAS	CE	Index
REAGENT A - Lyophilized powder			
Sodium arsenate	10048-95-0	-	-
Fructose 6 phosphate	81028-91-3	-	-
NAD	53-84-9	-	-
ATP	987-65-5	-	-
ADP	20398-34-9	-	-
Magnesium sulfate	7487-88-9	-	-
Nitro blue tetrazolium	298-83-9	-	-
REAGENT B - Restoration solution.....1 x 10 ml			

Warning and precaution

The product must be used exclusively by specialized technical operators.
The product is classified as hazardous.
Read with attention the information written on the label (dangerous symbols, risks and safety phrases).
Consult always the safety data sheet where the information about the risks of the preparation, precautionary measures during use, first aid and disposal are available.
Do not use if primary packaging is damaged.

Storage

Store the preparation at -20°C. Keep the containers tightly closed.

Stability

When making aliquots of the product and freezing them at -20°C, Bio-Optica does not respond for the loss of activity resulting from this practice.
Product validity: 1 year.

Disposal

Hazardous preparation: observe all state and local environmental regulations regarding waste disposal.

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References

- Bonilla E, Schotland DL. Histochemical diagnosis of mu-scle phosphofructokinase deficiency. Arch Neurol. 1970;22:8-12 Pearse AGE. Histochemistry, Theoretical and Applied. 3rd ed. Boston: Little Brown and Company; 1972;2:902.

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