SELF-RELIANT BIOACTIVE FORMS OF VITAMIN B12

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HINTERGRUND

LÖSUNG

Self-reliant bioactive forms of vitamin B12 that bypass intracellular enzymatic processing of the micronutrient

ANWENDUNGSBEREICHE

- Newborns with a gene defect in the cblC (MMACHC) gene and other vitamin B12-dependent disorders leading to:
  - homocystinuria
  - methylmalonic aciduria
- Elderly people with latent, subclinical vitamin B12 deficiency
- Supportive treatment of Alzheimer's and dementia patients
- Vegetarians and vegans

Developmental Status

- This new generation of self-reliant forms of vitamin B12 has been synthesized and isolated in pure form.
- Chemical reactivity with physiological reductants exhibited self-reliant activation
- The enzymatic activity of pathogenic variants of the cblC enzyme causing early and late disease onset in humans was restored to near normal levels
- Homocystinuria and methylmalonic aciduria where corrected in cblC patient cells