

Technical Data Sheet Biphasic Calcium Phosphate (nanopowder)

Properties

Form : Nanopowder	Biocompatible
Particle Size : <100 nm	Biodegradable
Osteoconductive – osteoinductive	Chemical affinity towards biological molecules

Product Description

Biphasic calcium phosphate (BCP) bioceramics belong to a group of bone substitute biomaterials that consist of an intimate mixture of HA and β -TCP of varying HA/ β -TCP ratios. The bioactivity of biphasic calcium phosphahete (BCP) may be controlled by manipulating the HA/ β -TCP ratio. A mechanical mixture of HA and β -TCP does not lead to such bioactivity. The wet elaboration conditions of calcium-deficient apatite CDHA, followed by sintering, convert it into BCP.

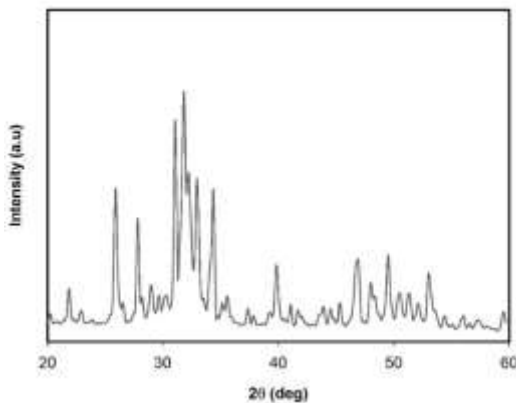
Application areas: Bone graft, nanomedicine, tissue engineering, bioimaging, and drug delivery systems

Shipping: Ready to ship in 4 business days.

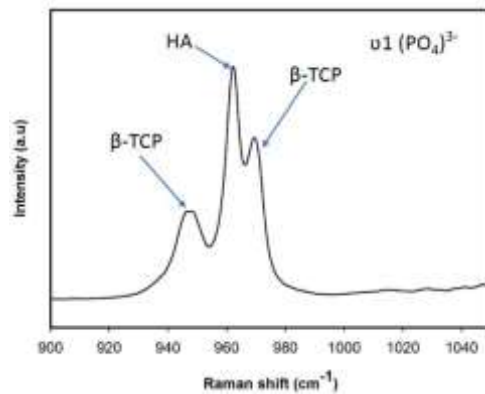
Storage conditions: Room temperature for the powder form, +4°C for the suspension form

Packaging : 25 mL - 100 mL

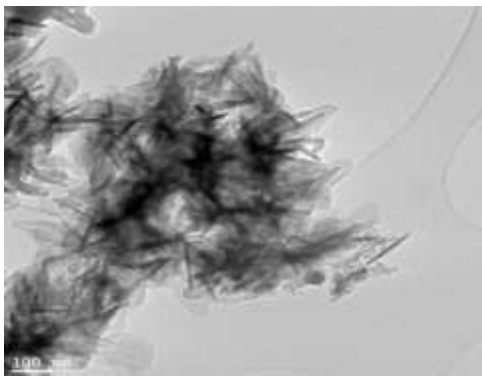
Quality Control



XRD spectrum of β -TCP nanoparticles



Raman spectrum of β -TCP



Bright-field TEM micrograph of β -TCP nanoparticle Nanoparticles