

pKH2 Beta-Synuclein P123H Vector

Catalogue number: 152053

Sub-type:

Images:

Contributor

Inventor: Dr Fiona Benson

Institute: Lancaster University

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: pKH2 Beta-Synuclein P123H Vector

Alternate name:

Class:

Conjugate:

Description: pKH2 ("P123H") is a derivative of pET15b with the open reading frame encoding the P123H mutant human beta-synuclein (Δ¹⁻¹²³-synuclein) cloned in via the vector NdeI and BamHI restriction sites. It was constructed via site-specific mutagenesis of pJEK12 (pET15b-wt Δ¹⁻¹²³-synuclein), replacing the C at position 368 in the ORF nucleotide sequence with A, thus altering the 123rd codon from CCC encoding proline (P) to CAC encoding histidine (H). In this construct P123H Δ¹⁻¹²³-synuclein is expressed as a fusion protein with an N-terminal six His tag.

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes: Beta synuclein is an abundant pre-synaptic phosphoprotein that is found in the brain and is homologous to alpha-synuclein. Beta-synuclein is distinct from alpha-synuclein in that it lacks the majority of the hydrophobic non-amyloid-beta component of the Alzheimer's disease amyloid region. Due to this beta-synuclein is less likely to form insoluble aggregates when compared to alpha-synuclein. It is thought that beta-synuclein may have a protective role against alpha-synucleinopathies. Overexpression of beta-synuclein mutants (P123H and V70M) in neuroblastoma cells results in enhanced lysosomal pathology suggesting a causative role for these missense mutations in neurodegeneration stimulation

Target details

Target: Beta-synuclein

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application:

Application notes: pKH2 ("P123H") is a derivative of pET15b with the open reading frame encoding the P123H mutant human beta-synuclein (β^2 -synuclein) cloned in via the vector NdeI and BamHI restriction sites. It was constructed via site-specific mutagenesis of pJEK12 (pET15b-wt β^2 -synuclein), replacing the C at position 368 in the ORF nucleotide sequence with A, thus altering the 123rd codon from CCC encoding proline (P) to CAC encoding histidine (H). In this construct P123H β^2 -synuclein is expressed as a fusion protein with an N-terminal six His tag.

Handling

Format:

Concentration:

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer:

Storage conditions:
Shipping conditions:

Related tools

Related tools:

References

References:

CancerTools.org