Title	^{156}Dy as an activable yield tracer for determination of rare earth elements in biological materials by neutron activation analysis
Sub Title	
Author	塚田, 正道(Tsukada, Masamichi) 吉川, 英樹(Yoshikawa, Hideki) 矢永, 誠(Yanaga, Makoto) 遠藤, 和豊(Endo, Kazutoyo) 中原, 弘道(Nakahara, Hiromichi)
Publisher	共立薬科大学
Publication year	1989
Jtitle	共立薬科大学研究年報 (The annual report of the Kyoritsu College of Pharmacy). No.34 (1989.) ,p.102- 102
JaLC DOI	
Abstract	
Notes	抄録
Genre	Technical Report
URL	https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AN00062898-00000034-0102

No. 34 (1989)

^{156}Dy as an Activable Yield Tracer for Determination of Rare Earth Elements in Biological Materials by Neutron Activation Analysis*

Masamichi TSUKADA**, Hideki YOSHIKAWA, Makoto YANAGA***
Kazutoyo ENDO*** and Hiromichi NAKAHARA***

塚田正道**, 吉川英樹, 矢永　誠***
遠藤和豊***, 中原弘道***

Use of an enriched ^{156}Dy isotope as an activable yield tracer for the determination of lanthanoid contents in various biological reference materials has been proposed. The method consists of preconcentration of the lanthanoid in the ^{156}Dy doped samples followed by neutron irradiation and further chemical purification steps. The chemical behaviour of lanthanoid elements in the whole procedure was found, in separate runs, similar to that of the added ^{156}Dy within experimental errors. Simple purification steps after irradiation allow the measurement of relatively short-lived nuclides and diminish the radiation dose received during the chemical treatment. The present results for orchard leaves (NBS SRM 1571) are generally in good agreement with the previously reported data. Some new data are obtained for other biological reference materials.

* 本報告は *Journal of Radioanalytical and Nuclear Chemistry, Articles*, **125**, (2) 351—365 (1988) に発表.
** 明治大学農学部
*** 東京都立大学理学部