



US 20140194306A1

(19) **United States**

(12) **Patent Application Publication**

Andersen et al.

(10) **Pub. No.: US 2014/0194306 A1**

(43) **Pub. Date: Jul. 10, 2014**

(54) **NUCLEIC ACID SEQUENCES FROM
DIABROTICA VIRGIFERA VIRGIFERA
LECONTE AND USES THEREOF**

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(21) Appl. No.: **14/102,397**

(22) Filed: **Dec. 10, 2013**

Related U.S. Application Data

(62) Division of application No. 12/606,948, filed on Oct.
27, 2009, now Pat. No. 8,614,370, which is a division
of application No. 10/205,189, filed on Jul. 24, 2002,
now Pat. No. 7,612,194.

(60) Provisional application No. 60/307,512, filed on Jul.
24, 2001.

Publication Classification

(51) **Int. Cl.**
C07K 14/435 (2006.01)
C12Q 1/68 (2006.01)

(52) **U.S. Cl.**
CPC **C07K 14/43563** (2013.01); **C12Q 1/6888**
(2013.01)
USPC **506/9**; 536/23.5; 536/24.31; 435/348;
435/325; 435/419; 435/257.2; 435/252.3;
435/254.11; 506/16; 506/17; 435/29; 435/7.2;
435/6.11

(57) **ABSTRACT**

Expressed Sequence Tags (ESTs) isolated from the Western
Corn Rootworm, *Diabrotica virgifera virgifera* LeConte, are
disclosed. The invention encompasses nucleic acid molecules
that encode *D. v. virgifera* protein homologs and fragments
thereof. In addition, antibodies capable of binding the pro-
teins are encompassed by the present invention. The disclosed
ESTs have particular utility in isolating genes and promoters,
identifying and mapping the genes involved in developmental
and metabolic pathways, and determining gene function. The
ESTs provide a unique molecular tool for the targeting and
isolation of novel genes for plant protection and improve-
ment. The invention also relates to methods of using the
disclosed nucleic acid molecules, proteins, fragments of pro-
teins, and antibodies, for example, for gene identification and
analysis, and preparation of constructs.