

IDEXX xChek*: Creating a User-Defined Assay for the IDEXX APP-ApxIV Ab Test

Creating a user-defined assay is an easy process of two tasks—editing an xChek* file to allow you to create an assay, and then creating the assay within xChek.

To edit the xChek.ini file:

1. From the task bar, choose **Start> Run**, and type “xchek.ini” into the text box. Click **OK**.
2. After the xChek.ini file opens, locate the line labeled “AllowNewAssays.”
3. If the value for that line is “0,” change it to “1.” If the value is already “1,” do not do anything.
4. Locate the line labeled “[BasicGraphs]” and scroll to the end of the section.
5. Enter “APP=17.”
6. From the menu bar, choose **File> Save**, and then choose **File> Exit**.

To create the assay:

1. From the task bar, choose **Start> Programs> xChek> xChek** to open the xChek program.
2. If prompted to log in, enter your initials, and then click **OK**.
3. From the menu bar, choose **Database> Assays> All** to open the Assay dialog box.
4. Click **New** and enter “APP ApxIV Antibody Test” into the Name field, “APP” into the Code field, and “Unknown” into the Kit Lot field. Today’s date (mm/dd/yyyy) is automatically entered into the Expiration field.

Note: When you begin testing, update the information in the Kit Lot and Expiration fields with the actual kit lot number and expiration date.

The screenshot shows the 'New Assay' dialog box with the following fields and values:

Name:	APP ApxIV Antibody Test
Code:	APP
Kit Lot:	unknown
Expiration:	11/16/2011
Comment:	

Buttons: OK, Cancel, New, Delete, Print

Tabs: Basic, Calculations, Titers, Bins

5. Click the **Basic** button, and select or enter the following information for the respective fields:

Case Type: Animal	Samp Filter: 450
Template: SIV Vert	Ref. Filter: 0
Species: Cattle	Dilution: 10
Technology: ELISA	Wells: 1

The screenshot shows the 'New Assay' dialog box with the 'Basic' tab selected. The fields are:

Case Type:	Animal	Samp Filter:	450
Template:	SIV Vert	Ref Filter:	0
Species:	Cattle	Dilution:	10
Technology:	ELISA	Wells:	1

Buttons: OK, Cancel

Note: Due to a problem with selecting swine as the species type in versions 3.2 and 3.3 of xChek, the species used for this user-defined assay is cattle.

6. Click **OK** to save the settings.
7. Click the **Calculations** button, and select or enter the following information:

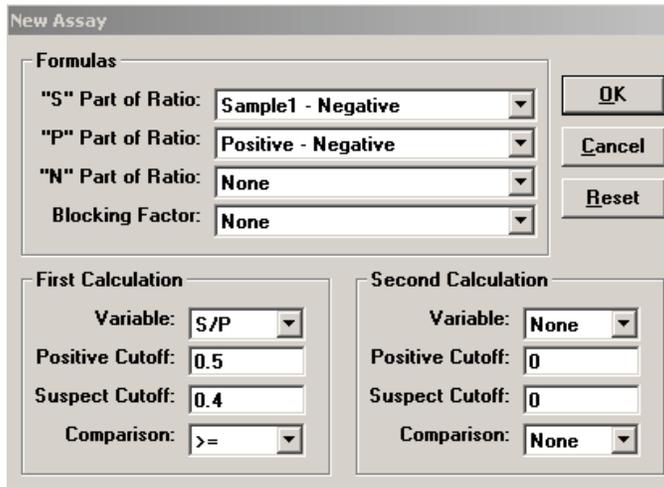
Formulas:

"S" Part of Ratio: Sample1 - Negative
"P" Part of Ratio: Positive - Negative
"N" Part of Ratio: None
Blocking Factor: None

First Calculation:

Variable: S/P
Positive Cutoff: 0.5
Suspect Cutoff: 0.4
Comparison: >=

Note: xChek does not support the S/P% calculation. Instead, xChek calculates an S/P value. The cutoff values have been updated to match the new calculation and the interpretation is the same.



The screenshot shows the 'New Assay' dialog box with the following settings:

- Formulas:**
 - "S" Part of Ratio: Sample1 - Negative
 - "P" Part of Ratio: Positive - Negative
 - "N" Part of Ratio: None
 - Blocking Factor: None
- Buttons:** OK, Cancel, Reset
- First Calculation:**
 - Variable: S/P
 - Positive Cutoff: 0.5
 - Suspect Cutoff: 0.4
 - Comparison: >=
- Second Calculation:**
 - Variable: None
 - Positive Cutoff: 0
 - Suspect Cutoff: 0
 - Comparison: None

8. Click **OK** to save these settings, and then click **OK** to save the assay to the database. You can now test for APP-ApxIV antibodies using the xChek Assay Management System.

Note: xChek does not evaluate controls or results for validity when you use a user-defined assay. You must evaluate the results from each assay in accordance with good laboratory practices. To evaluate your assay validity, please refer to the insert provided with this test.

Setting Up Additional Display Variables

Only OD values are displayed in the reporting options for this user-defined assay. To set up additional display variables, follow the directions below.

1. From the xChek menu bar, choose **Reports> Analyze Cases** to open the Filter Criteria for Analyze dialog box.
2. Enter the desired search criteria and click **OK**. The Select Cases for Analyze dialog box appears.
3. Select the desired cases and click **OK**. The Analyze Report dialog box appears.

Analyze Report

Case Options

- Show Block Reports
- Show Statistics
- Show Controls
- Show NHC Wells
- Show Original ODs
- Show Comments
- Show Kit Lot/Expiration
- Single Column

Graph Options

- Show Graphs
- Show Statistics
- Show Key
- Color Graphs
- Stats on Top

Mean

- Arithmetic
- Geometric

Style

- 2D Histogram
- 3D Histogram

Buttons: OK, Cancel, Variables, Sort, Baseline, Footers

4. Click the **Variables** button to open the Display Variables dialog box.
5. Select the desired options and click **OK**. Click **OK** again to save the settings.

Display Variables

- Well Type
- Optical Density
- Tube Number
- Sex
- Species
- Breed 1
- Breed 2
- Animal Type
- Animal ID1
- Animal ID2
- Calendar Age
- Breeding Age
- Quality
- Mean Sample
- Sample
- Pos
- Neg
- Blocking
- S/P Ratio
- S/N Ratio
- B/A Ratio
- S/NHC Ratio
- Titer
- Titer Log2
- Titer Group
- Result

Buttons: OK, Cancel

For more information, call IDEXX Technical Service at 1-800-548-9997, contact your local area manager or visit us on the web at idexx.com.