

DPCC Data Standard Reference for Protein Reagent v1.2

|                         | Project_Identifier   | Contributing_Institution   | Reagent_Name                                     | Sample_Identifier  |
|-------------------------|--|--|--|--|
| <b>Input Type</b>       | Text Field   | Text Field   | Text Field                                       | Text Field   |
| <b>Definition</b>       | A unique Project Identifier generated by the DPCC by combining the Center-generated Project Code and a random 4-digit number | The institution code for the group that CREATED THE REAGENT. Must be one of the CEIRS institution codes assigned by NIAID.                             | Name of the reagent assigned by the investigator | Identifier assigned to the virus used to create the reagent  |
| <b>Format</b>           | Project_Code_XXXX<br><br>Maximum length: 21 characters   | Center three-letter code followed by three digits.<br><br>Maximum length: 6 characters   | Text<br><br>Maximum length: 150 characters       | Center-specific<br><br>Allowed characters include alphanumeric, hyphen, and underscore: a-z, A-Z, 0-9, -, _<br><br>Maximum length: 50 characters |
| <b>Value List</b>       | None   | None   | None   | Text<br>NA   |
| <b>Curation</b>         | The entry must be a Project Identifier value registered with the DPCC.   | The entry must be an Institution Code value registered with the DPCC.<br><br>Center 3-letter codes are case-sensitive and must be entered in all-caps. | None   | It should match with the Sample_Identifier provided in related data submissions.   |
| <b>Examples</b>         | SJCProj02_4001   | SJC101   | VN1203 H5 protein                                | 21145-001a   |
| <b>Notes</b>            |  |  |  | Enter NA if the reagent is not related to a surveillance submission.   |
| <b>Dependent Fields</b> |  |  |  |  |
| <b>Validation</b>       | Project_Identifier should be a valid project identifier.   | Must be an Institution Code value registered with the DPCC   | Validate field length                            | Validate field length  |
| <b>Message Code</b>     | Error_9_PROJECT_NOT_FOUND  | Error_1_INVALID_VALUE  | Error_70_INVALID_FIELD_LENGTH                    | Error_70_INVALID_FIELD_LENGTH  |
| <b>Validation</b>       | Project_Identifier exists but user does not have permission to access or edit the project.                                   |  |  |  |
| <b>Message Code</b>     | Error_4_DENIED_USER_ACCESS   |  |  |  |
| <b>Validation</b>       |  |  |  |  |
| <b>Message Code</b>     |  |  |  |  |
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| <b>Message Code</b>     |  |  |  |  |

|                         | Strain_Name   | Protein                                   | Produced_in                               | BEI_Number   |
|-------------------------|---|---|---|--|
| <b>Input Type</b>       | Text Field  | Text Field                                | Text Field                                | Text Field   |
| <b>Definition</b>       | The WHO strain name of the virus that was used to create the reagent  | Description of the protein produced       | Source of production for the protein      | The identification number assigned to the reagent by BEI |
| <b>Format</b>           | Antigenic Type/Host of Origin/Geographical Origin/Strain Number/Year of Isolation (Subtype)<br><br>rg-Antigenic Type/Host of Origin/Geographical Origin/Strain Number/Year of Isolation [rg details] (Subtype)<br><br>Maximum length: 150 characters  | Text<br><br>Maximum length: 50 characters | Text<br><br>Maximum length: 50 characters | BEI Number<br><br>Maximum length: 20 characters          |
| <b>Value List</b>       | Text<br>U<br>NA   | None                                      | None                                      | Text<br>NA   |
| <b>Curation</b>         | WHO strain naming convention: Fields must be ordered as follows and separated with the '/' character:<br>1. The antigenic type (e.g., A, B, C, D)<br>2. The host of origin (e.g., swine, equine, chicken. For human-origin viruses, no host of origin designation is given.)<br>3. Geographical origin (e.g., Denver, Taiwan)<br>4. Strain number (e.g., 15, 7)<br>5. Year of isolation (e.g., 2009, 1934)<br>6. For influenza A viruses, the hemagglutinin and neuraminidase antigen description in parentheses (e.g., (H1N1), (H3N2))<br><br>If the strain is a reverse genetic virus, prefix Strain_Name with rg-. Provide reverse genetic details in brackets between year of isolation and subtype.<br><br>Enter NA if the reagent is not related to a virus strain. | None                                      | None                                      | The entry must be a valid BEI number.                    |
| <b>Examples</b>         | A/Hong Kong/1/1968 (H3N2),<br>A/chicken/Fujian/4/2002 (H3N6),<br>A/chicken/Fujian/4/2002 (HxNx),<br>A/chicken/Fujian/4/2002 (mixed),<br>A/swine/Iowa/233-56/2011 (H3N2v),<br>A/duck/Alberta/35/1976 (H1N1),<br>B/Hong Kong/432/2014,<br>C/Texas/19876/2011,<br>rg-A/Puerto Rico/8/1934 (H1N1), or<br>rg-A/Egypt/N03072/2010 [PR8 internal R 6+2] (H5N1)   | H7,<br>N5-His tag, or<br>H3 ectodomain    | baculovirus, or<br>cell culture           | NR-12277   |
| <b>Notes</b>            | Reference: <a href="http://www.cdc.gov/flu/about/viruses/types.htm">http://www.cdc.gov/flu/about/viruses/types.htm</a><br><br>(HxNx) can be used in cases where a partial subtype has been determined (e.g., H5Nx).<br><br>If there are mixed subtypes contained within a sample use A/chicken/Fujian/4/2002 (mixed) for Strain_Name or list multiple comma-separated Strain_Names:<br>A/mallard/Alaska/2/2007 (H3N8), A/mallard/Alaska/2/2007 (H3N9).<br><br>For other virus types, enter the common Strain_Name.  |   |   | Enter NA if the reagent was not deposited with BEI.      |
| <b>Dependent Fields</b> |   |   |   |  |
| <b>Validation</b>       | Validate field length   | Validate field length                     | Validate field length                     | Validate field length                                    |
| <b>Message Code</b>     | Error_70_INVALID_FIELD_LENGTH   | Error_70_INVALID_FIELD_LENGTH             | Error_70_INVALID_FIELD_LENGTH             | Error_70_INVALID_FIELD_LENGTH                            |
| <b>Validation</b>       | Influenza virus strain names must begin with the single letter A, B, C, or D, or be prefixed with rg-. Other strain names are not validated.  |   |   |  |
| <b>Message Code</b>     | QC_136_STRAIN_NAME_NOT_VALIDATED  |   |   |  |
| <b>Validation</b>       | Host of origin element of strain name must be alphanumeric, underscore, dash, period, or single quote: a-z, A-Z, 0-9, -, ., ' , ,'  |   |   |  |
| <b>Message Code</b>     | Error_137_INVALID_HOST_SPECIES_STRAIN_TEXT  |   |   |  |
| <b>Validation</b>       | Geographical origin element of strain name must be alphanumeric, underscore, dash, period, or single quote: a-z, A-Z, 0-9, -, ., ' , ,'   |   |   |  |
| <b>Message Code</b>     | Error_138_INVALID_LOCATION_STRAIN_TEXT  |   |   |  |
| <b>Validation</b>       | Strain number element of strain name must be alphanumeric, underscore, dash, or period: a-z, A-Z, 0-9, -, ., ' , ,'   |   |   |  |
| <b>Message Code</b>     | Error_139_INVALID_STRAIN_NUMBER_STRAIN_TEXT   |   |   |  |
| <b>Validation</b>       | Year of isolation element of strain name must be 4-digit year.  |   |   |  |
| <b>Message Code</b>     | Error_110_INVALID_STRAIN_YEAR   |   |   |  |
| <b>Validation</b>       | If strain is influenza A, subtype must be present as text between parentheses.  |   |   |  |
| <b>Message Code</b>     | Error_112_INVALID_STRAIN_SUBTYPE  |   |   |  |

|                         | Contact_Name   | Contact_Email  | Availability  | Publication_PMID   | Comments  |
|-------------------------|--|--|---|--|---|
| <b>Input Type</b>       | Text Field   | Text Field   | Text Field  | Text Field   | Text Field  |
| <b>Definition</b>       | The name of the point-of-contact for reagent requests or the name of the BEI depositor | Email address for the point-of-contact               | Whether the reagent is available to share with other investigators on the reagents page of the CEIRS Public Website | The PubMed Unique Identifier (PMID) for the publication in which the reagent was published.  | Text describing anything else of interest related to the submission |
| <b>Format</b>           | FirstName LastName<br>FirstName MI. LastName<br><br>Maximum length: 50 characters      | Text@domain.com<br><br>Maximum length: 50 characters | Text<br><br>Maximum length: 1 character   | PMID<br><br>Maximum length: 50 characters  | Text<br><br>Maximum length: 2000 characters                         |
| <b>Value List</b>       | None   | None   | Y<br>N  | Text<br>NA   | Text<br>NA  |
| <b>Curation</b>         | None   | The entry must be a valid email address.             | The entry must be one and only one member of the Value List.  | The entry must be a valid PMID number: 7 or 8-digit number with no leading zeros.<br><a href="http://www.nlm.nih.gov/bsd/mms/medlineelements.html#pmid">http://www.nlm.nih.gov/bsd/mms/medlineelements.html#pmid</a> | None  |
| <b>Examples</b>         | Jane Smith, or<br>Davey M. Jones   | jsmith@email.edu                                     | Y   | 19465683, or<br>NA   | NA  |
| <b>Notes</b>            |  |  | Y = Yes<br>N = No   | If the reagent was referenced in multiple publications, comma-separate the individual PMIDs.<br><br>Enter NA if the reagent was not referenced in a publication.   | If there are no comments, enter NA.                                 |
| <b>Dependent Fields</b> |  |  |   |  |   |
| <b>Validation</b>       | Validate field length  | Validate field length                                | Field value should be one of valid values as in list.   | Validate field length  | Validate field length   |
| <b>Message Code</b>     | Error_70_INVALID_FIELD_LENGTH  | Error_70_INVALID_FIELD_LENGTH                        | Error_1_INVALID_VALUE   | Error_70_INVALID_FIELD_LENGTH  | Error_70_INVALID_FIELD_LENGTH                                       |
| <b>Validation</b>       |  | Must be a valid email address.                       |   | Must be a valid PMID.  |   |
| <b>Message Code</b>     |  | Error_114_INVALID_EMAIL                              |   | Error_96_INVALID_PMID  |   |
| <b>Validation</b>       |  |  |   |  |   |
| <b>Message Code</b>     |  |  |   |  |   |
| <b>Validation</b>       |  |  |   |  |   |
| <b>Message Code</b>     |  |  |   |  |   |
| <b>Validation</b>       |  |  |   |  |   |
| <b>Message Code</b>     |  |  |   |  |   |
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