

## Metadata Specifications:

# Antibody Reagents

Proteins (natural or engineered) which ordinarily elicit an immune response in vivo; utilized in in vitro or in vivo studies for protein recognition and marking or as system perturbagens.

<b>Importance</b>	1: Required, 2: Required if available, 3: Optional
<b>Common Fields</b>	Fields that are common across all LINCX metadata standards
<b>Custom Fields</b>	Fields that are unique to a single LINCX metadata standard or common across only a subset of them

Common Fields

LINCX Field Name	Related to	Description	Comments	Importance
AR_LINCX_ID	Canonical	Global LINCX antibody ID	LINCX internal ID. This is a batch independent ID	1
AR_Name	Canonical	Antibody name according to the vendor or provider	-	1
AR_Alternative_Name	Canonical	Other names for the antibody	-	2
AR_Alternative_ID	Canonical	This field should be populated with alternative IDs other than RRIDs. A separate field exists for RRID.	-	3
AR_Center_Canonical_ID	Canonical	LINCX DSGC-specific canonical ID. This will be assigned by a given LINCX DSGC according to its reagent registration scheme.	-	1
AR_Relevant_Citations	Canonical	Relevant citations for antibody generation or labeling as PMIDs or patent numbers.	<a href="http://www.ncbi.nlm.nih.gov/pubmed/">http://www.ncbi.nlm.nih.gov/pubmed/</a> or available patents	2
AR_Center_Name	Batch	The name of the center using the antibody	-	1
AR_Center_Batch_ID	Batch	LINCX DSGC-specific antibody batch ID. This will be assigned by a given LINCX center according to its antibody registration scheme.	-	1
AR_Provider_Name	Batch	Vendor or lab that supplied the antibody	-	1
AR_Provider_Catalog_ID	Batch	ID or catalog number(s) assigned to the antibody by the vendor or provider	-	1
AR_Provider_Batch_ID	Batch	Batch or lot number assigned to the antibody by the vendor or provider	-	1
AR_Comments	Batch	DSGC Comments regarding reagent	-	3

Custom Fields

AR_RRID	Canonical	Resource Identification Initiative ID (RRID) from Antibody Registry ( <a href="http://antibodyregistry.org/search">http://antibodyregistry.org/search</a> ). If an RRID is not available yet, the user should request registration for their antibody with this registry	-	1
AR_Clone_Name	Canonical	Monoclonal clone name/ID	-	1
AR_Antibody_Type	Canonical	Specification of whether the antibody is natural (immunologically selected in an animal) or engineered.	-	1
AR_Target_Protein	Canonical	Nominal protein target, based on the recommended name from UniProt. If the name of a related entity (e.g. a portion of the polypeptide) was used instead to generate the antibody, this should be documented explicitly in AR_Immunogen	<a href="http://www.uniprot.org/">http://www.uniprot.org/</a>	1
AR_Target_Protein_ID	Canonical	UniProt ID of the protein target of the antibody. If the name of a related entity (e.g. a portion of the polypeptide) was used instead to generate the antibody, this should be documented explicitly in AR_Immunogen	<a href="http://www.uniprot.org/">http://www.uniprot.org/</a>	1
AR_Target_Protein_LINCX_ID	Canonical	Global LINCX protein ID of the protein target of the antibody	-	1
AR_Target_Protein_Center_ID	Canonical	LINCX DSGC-specific protein ID of protein target of antibody. This will be assigned by a given LINCX center according to its protein registration scheme	-	1
AR_Non-Protein_Target	Canonical	Name of the nominal target of antibody if not a protein	-	1
AR_Target_Organism	Canonical	Organism of the antibody target. Use standardized NCBI Taxon nomenclature (e.g. Homo sapiens)	-	1
AR_Immunogen	Canonical	Complete description of the immunogen (if produced in an animal) or entity used to select the epitope (if selected in vitro), including the source of the immunogen/entity (e.g. recombinantly expressed in E. coli, purified from canine pancreas) and its method of preparation. Any references relevant to the immunogen/target or production of the antibody should be listed in AR_Relevant_Reference	-	2
AR_Immunogen_Sequence	Canonical	Complete amino acid sequence of the immunogen or entity used to select the epitope if it was a peptide, protein fragment, or small protein	-	2
AR_Antibody_Species	Canonical	Organism from which the antibody was derived if produced in an animal or the species from which the Fc domain of the antibody was derived if engineered	-	1
AR_Antibody_Cloneality	Canonical	Identification of the antibody as monoclonal or polyclonal	-	1
AR_Antibody_Isotype	Canonical	Isotype (e.g. IgG, IgM, etc.) of the Fc domain of the antibody or antibody mixture if polyclonal	-	1
AR_Antibody_Production_Source_Organism	Canonical	Organism or cell type used to produce the antibody	-	2
AR_Antibody_Production_Details	Canonical	If the antibody was produced originally in an animal, including if it is currently derived from hybridoma cells, this field includes relevant information about the antibody production method that is not captured in other fields. If the antibody was engineered, this field includes information about the methods used to engineer and produce the antibody (e.g. humanized mouse antibody sequence expressed in and protein A-purified from yeast cells) and any other relevant details not captured in other fields. Any references relevant to antibody production should be listed in AR_Relevant_References	-	2
AR_Antibody_Labeling	Canonical	If the antibody was labeled or conjugated, what fluor or enzyme (e.g. horseradish peroxidase) is conjugated to the antibody	-	1
AR_Antibody_Labeling_Details	Canonical	If the antibody was labeled or conjugated, this field includes information about the protocol used to conjugate the fluor or enzyme to the antibody. Any references relevant to antibody labeling should be listed in AR_Relevant_References	-	2
AR_Antibody_Purity	Batch	Purity of the antibody	-	3