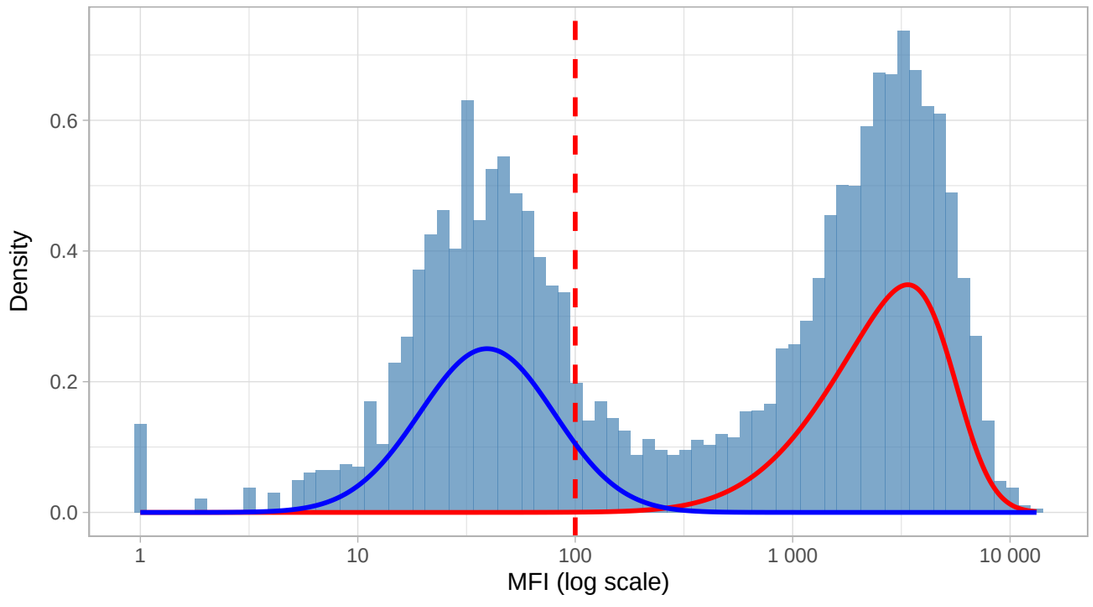
# Diagnostics: cmv_pp150

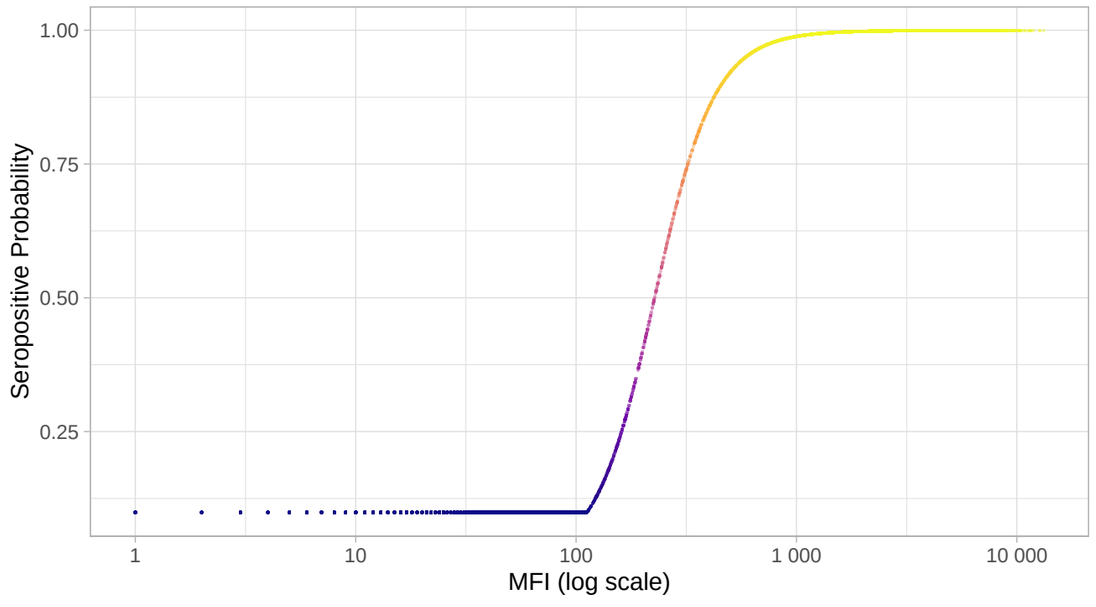
N=9424 | >0.95=4725 | <0.05=0 | Ambig=4699

## Original MFI Distribution: cmv_pp150

Hard cutoff threshold = 100

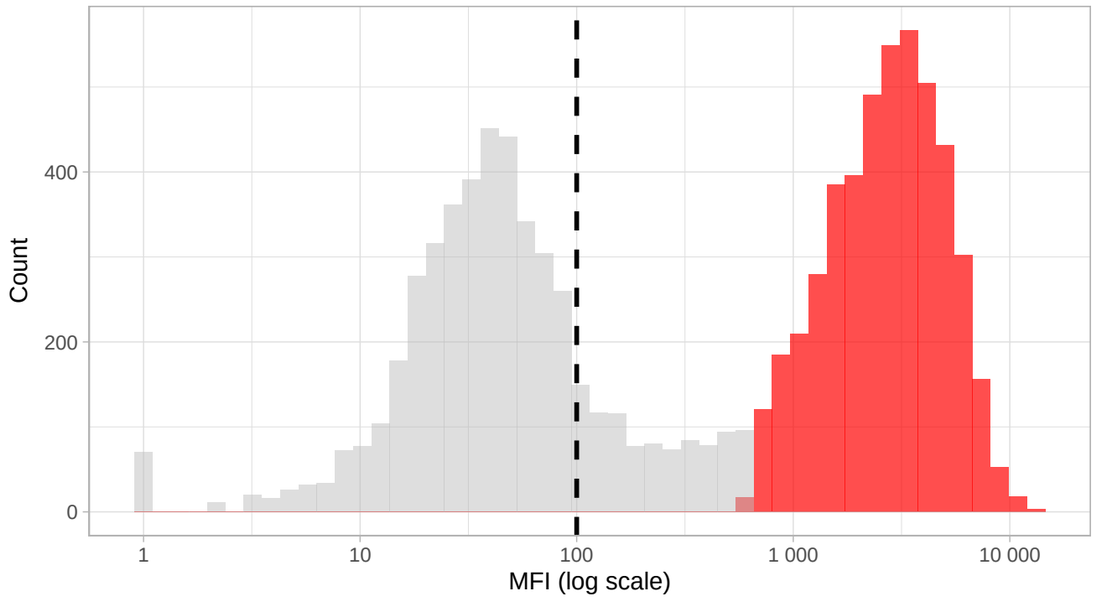



## IgG vs Seropositive Probability: cmv_pp150



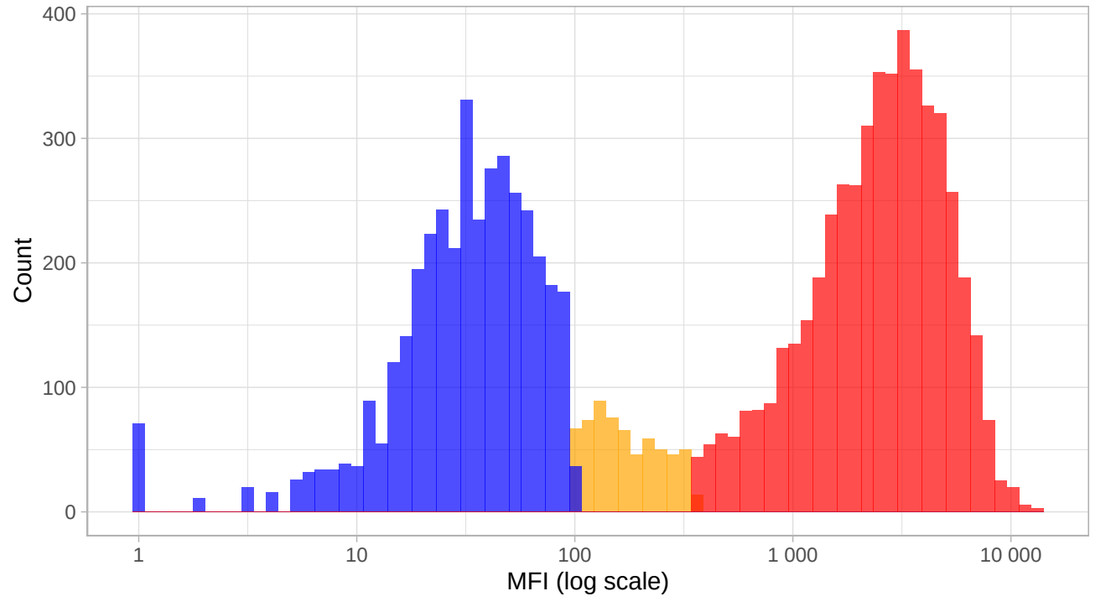

## High−Confidence Seropositive Distribution: cmv_pp150

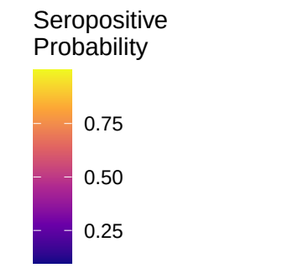
Prob threshold = 0.96

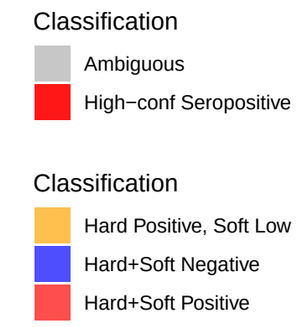



## Phenotype Distribution by Classification: cmv_pp150

Comparing hard vs soft classifications



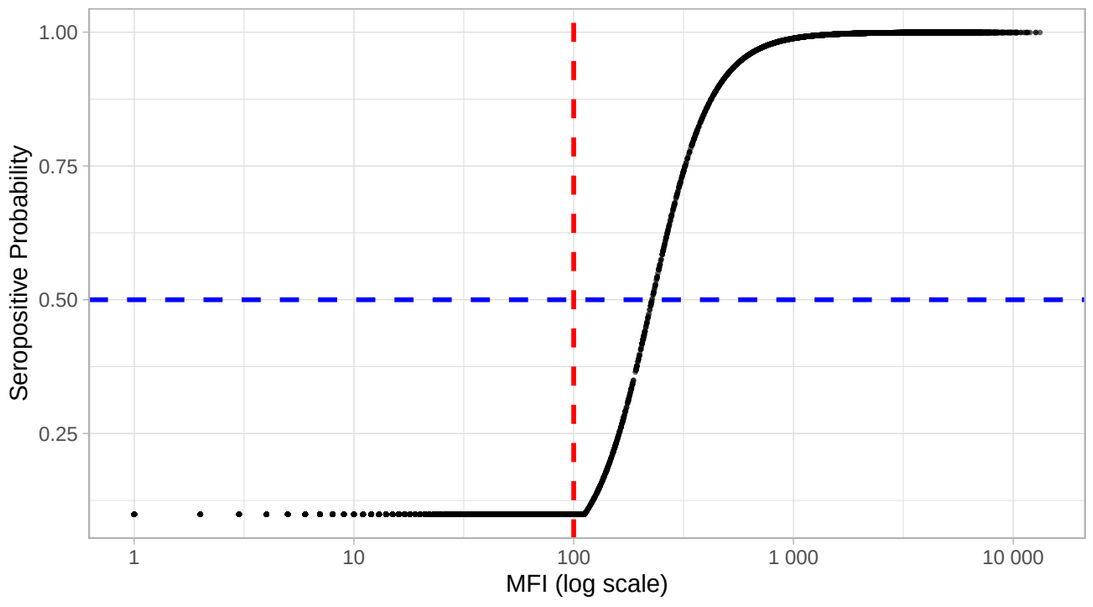







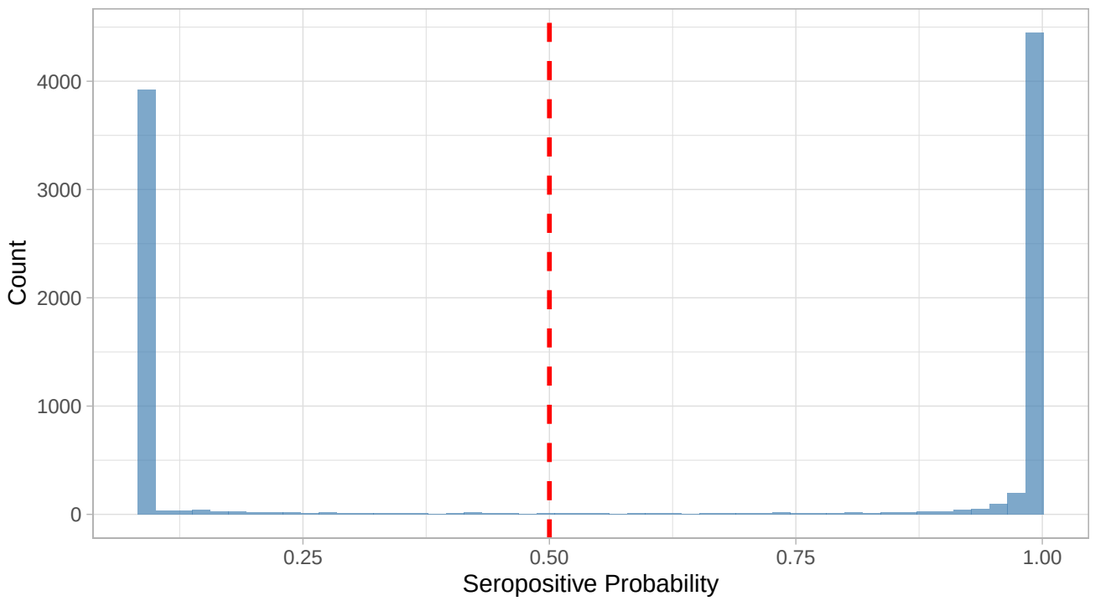
## IgG Level vs Seropositive Probability: cmv_pp150

Red line = hard threshold, Blue line = 50% probability



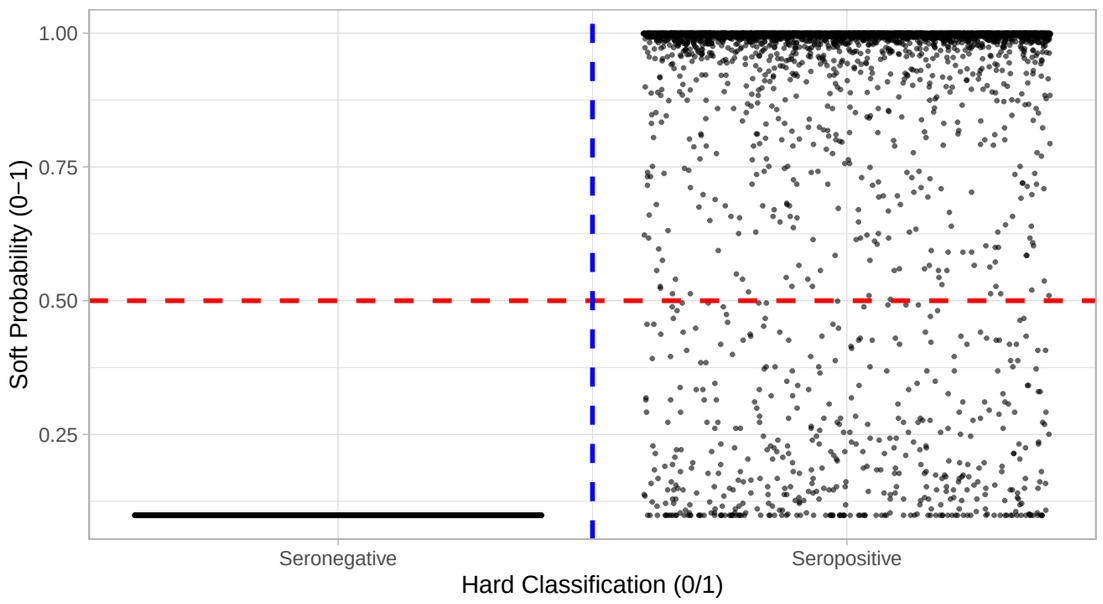

## Distribution of Seropositive Probabilities: cmv_pp150

Red line = 50% threshold



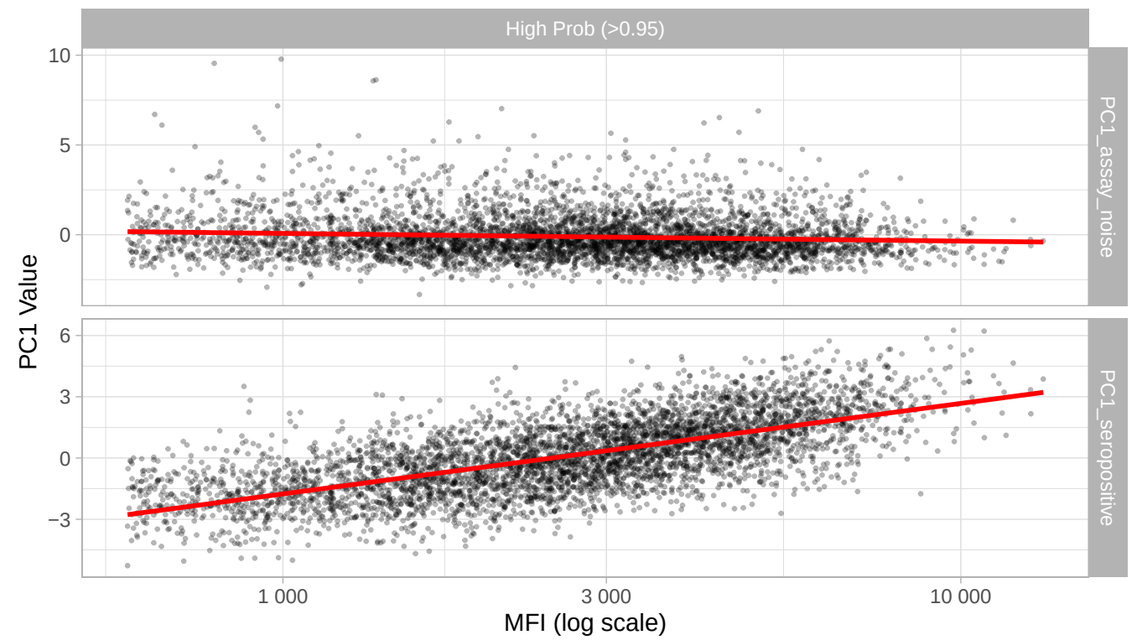

## Hard vs Soft Classification: cmv_pp150

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: cmv_pp150

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

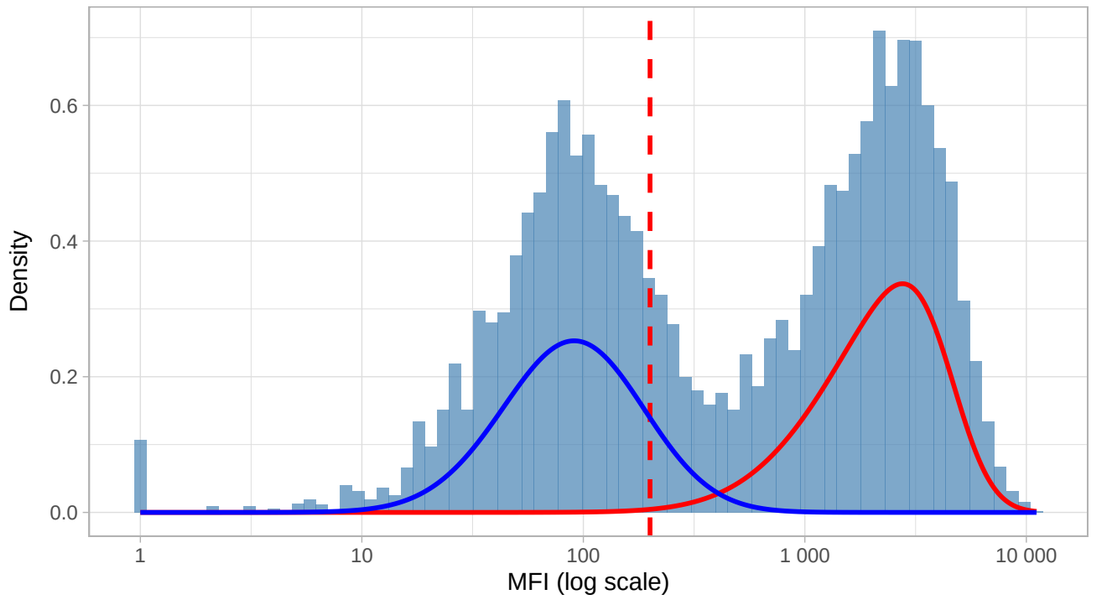


# Diagnostics: cmv_pp28

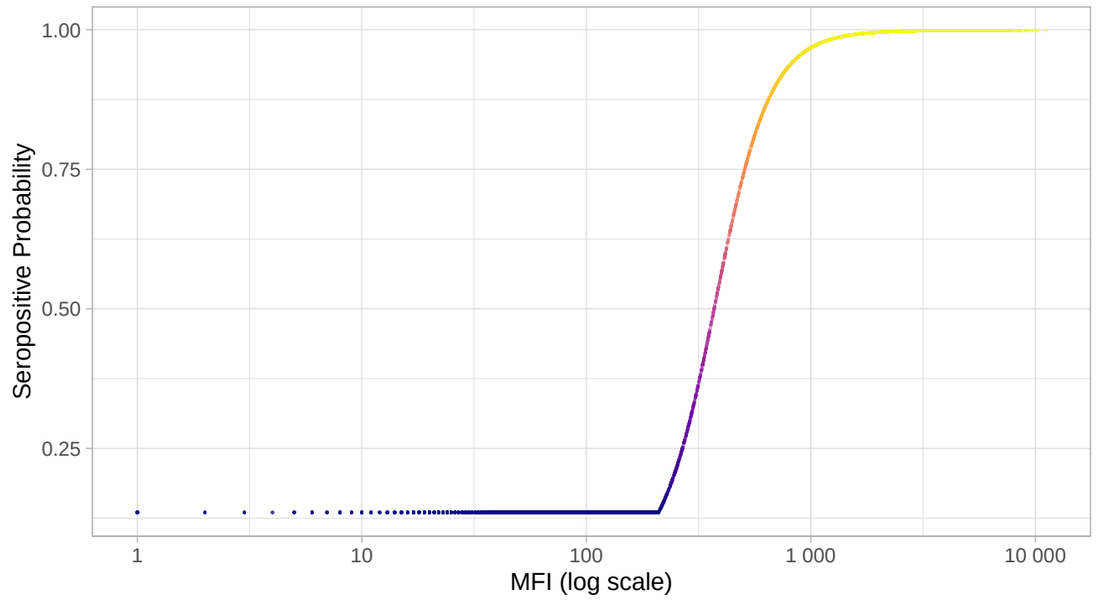
N=9424 | >0.95=4173 | <0.05=0 | Ambig=5251

## Original MFI Distribution: cmv_pp28

Hard cutoff threshold = 200

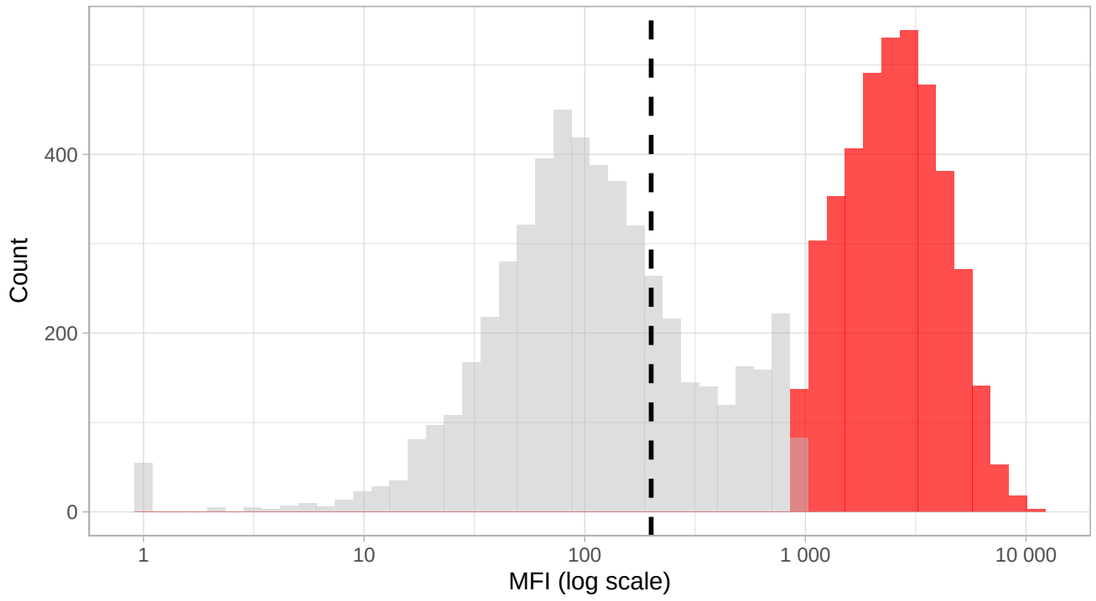



## IgG vs Seropositive Probability: cmv_pp28



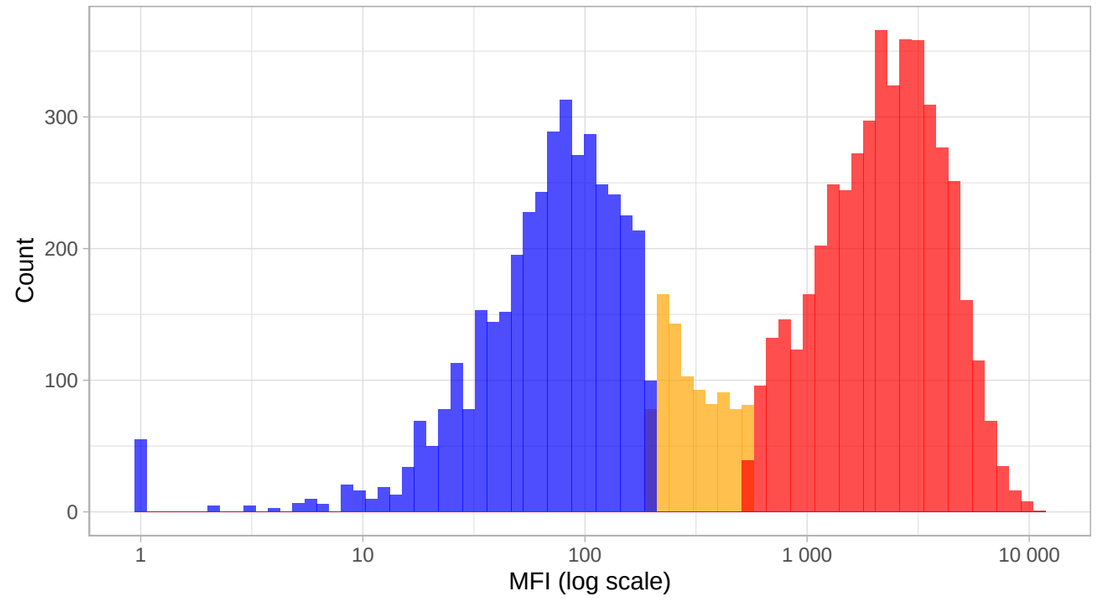

## High−Confidence Seropositive Distribution: cmv_pp28

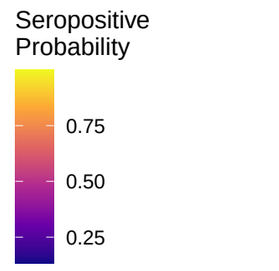
Prob threshold = 0.96




## Phenotype Distribution by Classification: cmv_pp28

Comparing hard vs soft classifications



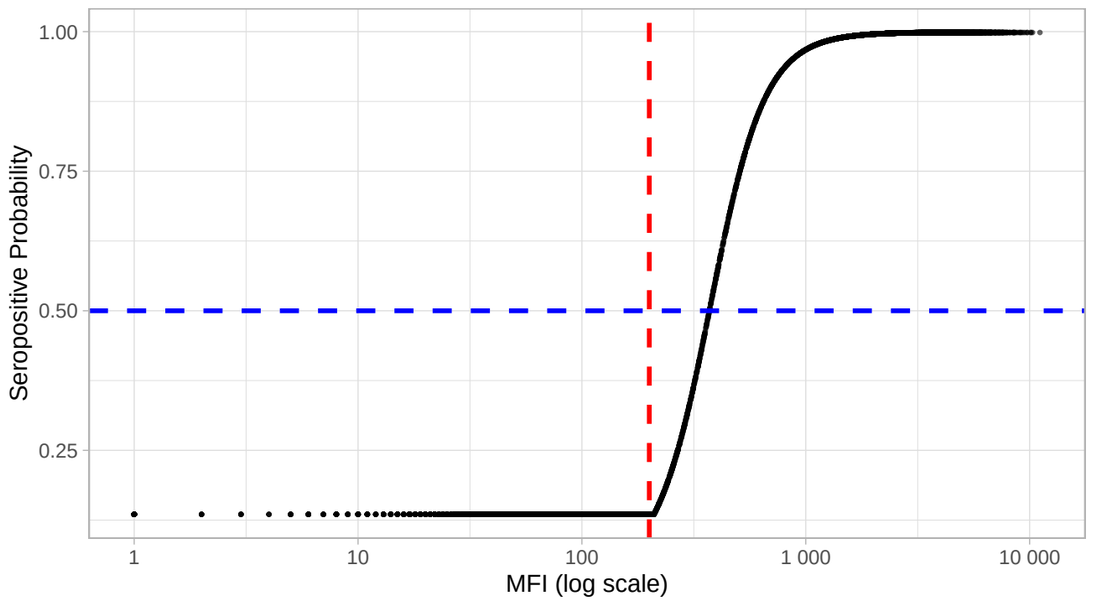







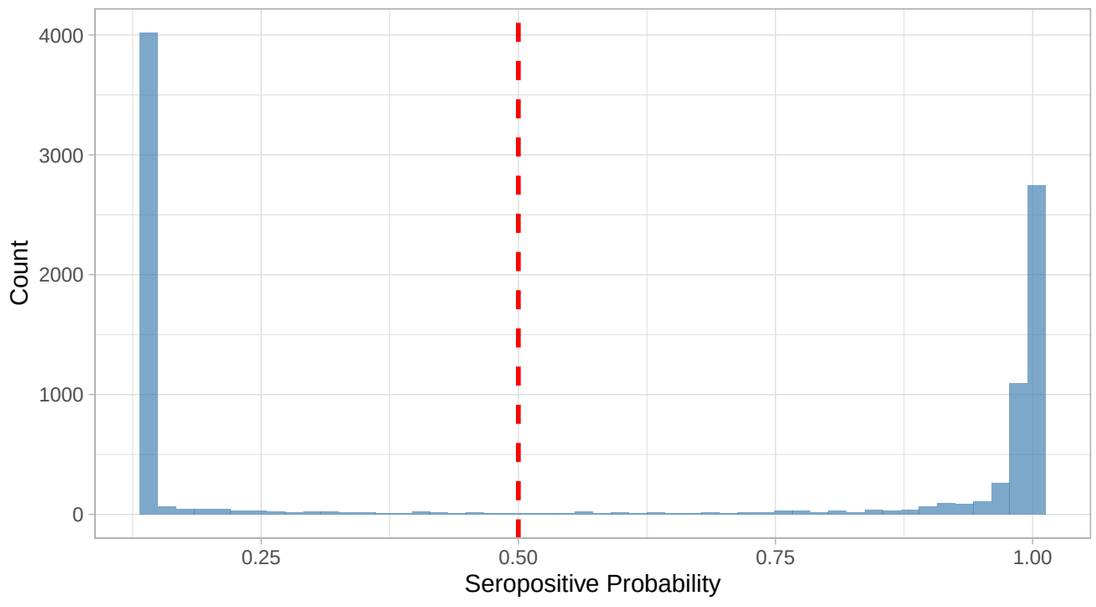

## IgG Level vs Seropositive Probability: cmv_pp28

Red line = hard threshold, Blue line = 50% probability



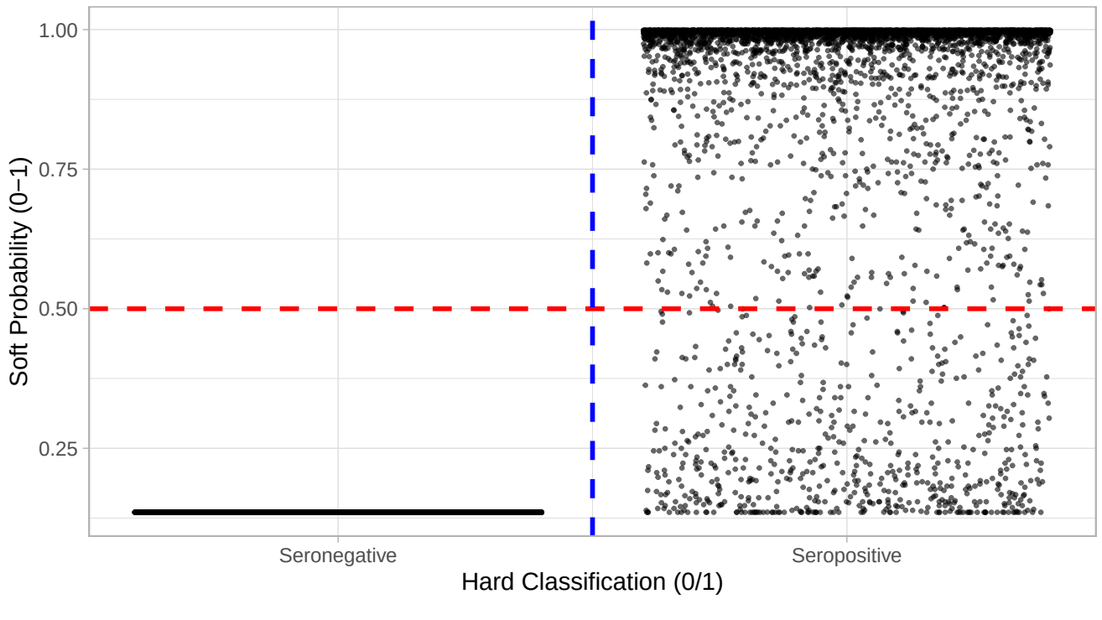

## Distribution of Seropositive Probabilities: cmv_pp28

Red line = 50% threshold



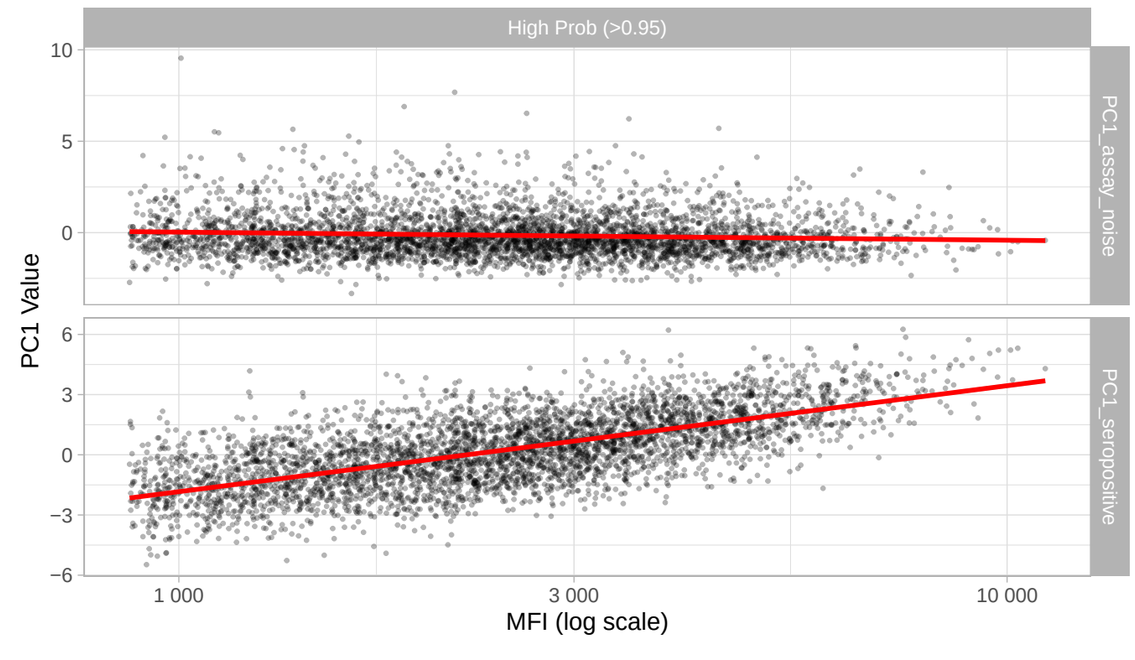

## Hard vs Soft Classification: cmv_pp28

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: cmv_pp28

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

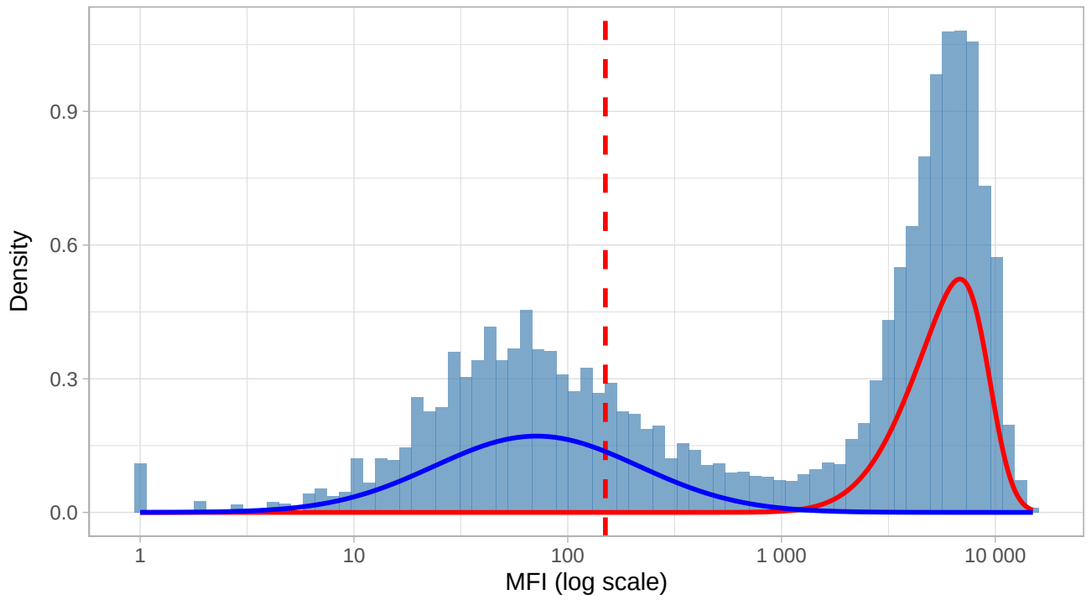


# Diagnostics: cmv_pp52

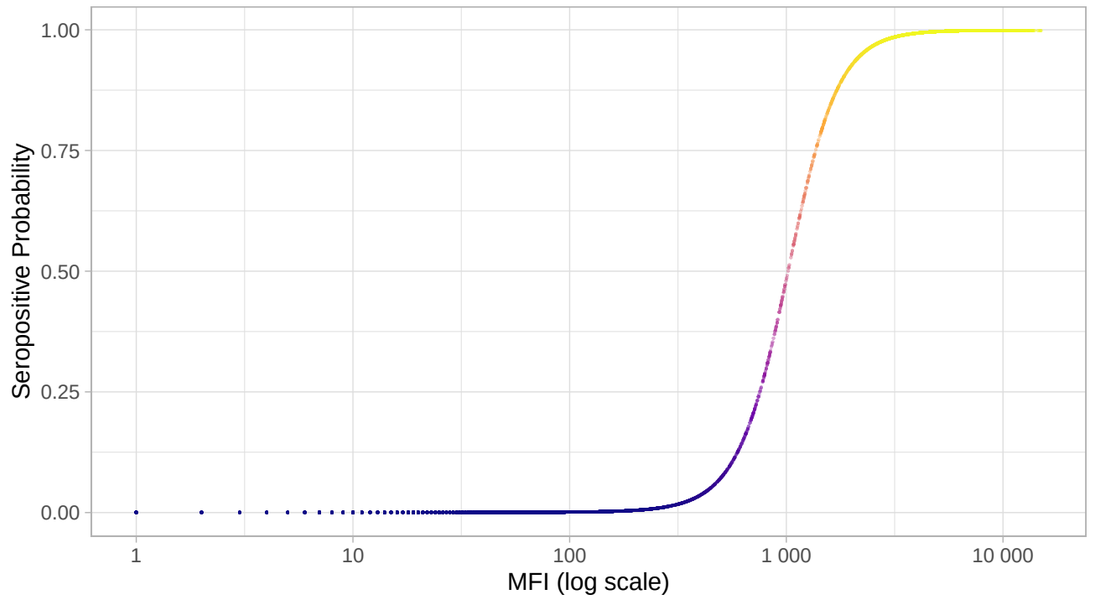
N=9424 | >0.95=4641 | <0.05=4141 | Ambig=642

## Original MFI Distribution: cmv_pp52

Hard cutoff threshold = 150

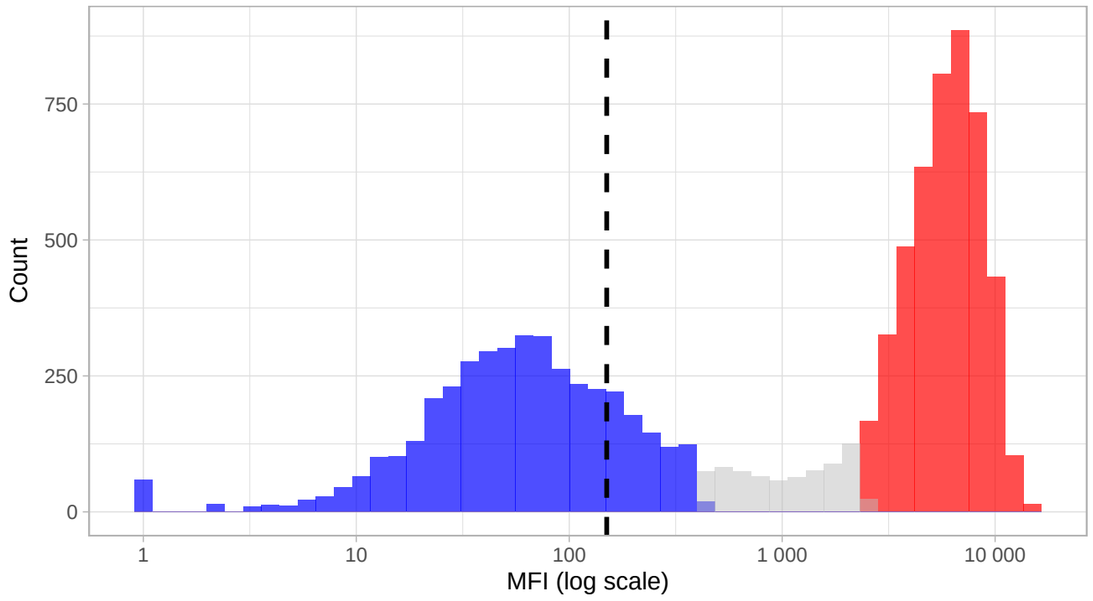



## IgG vs Seropositive Probability: cmv_pp52



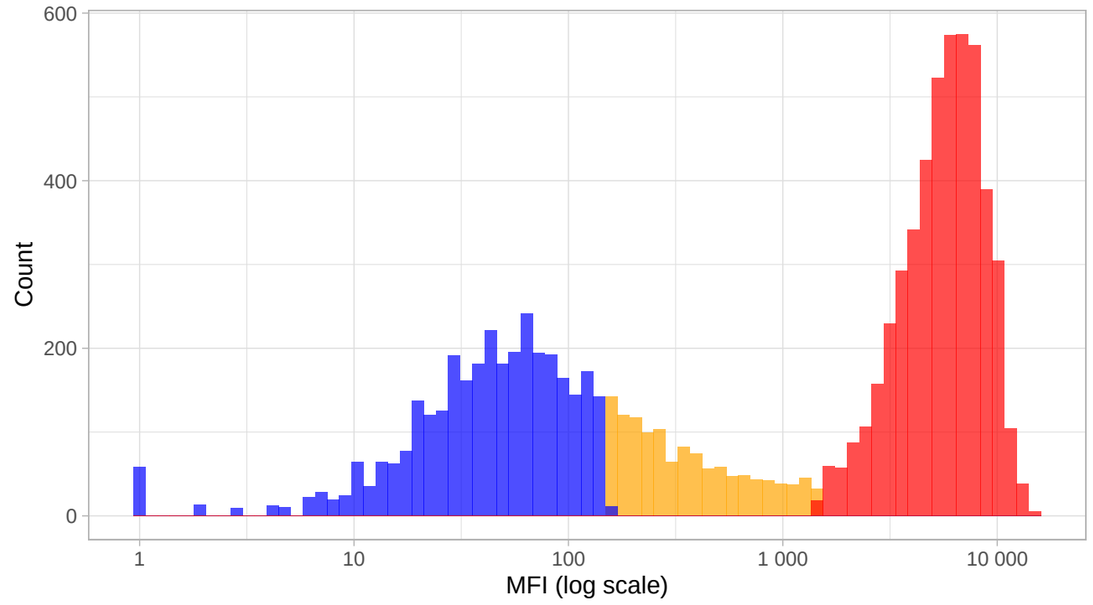

## High−Confidence Seropositive Distribution: cmv_pp52

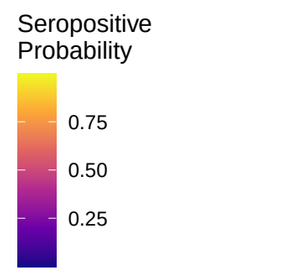
Prob threshold = 0.96




## Phenotype Distribution by Classification: cmv_pp52

Comparing hard vs soft classifications



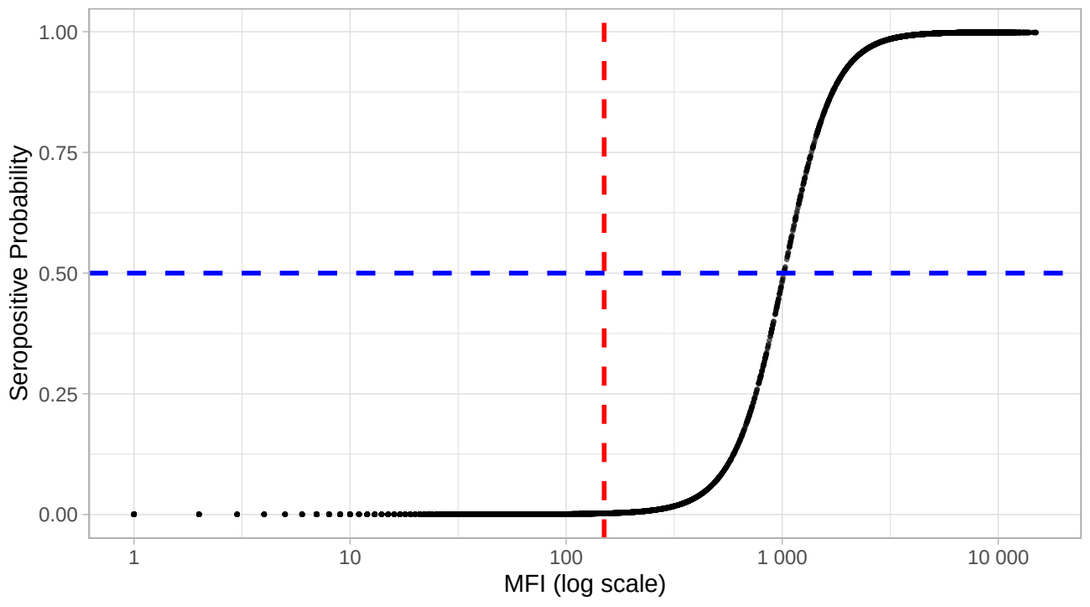







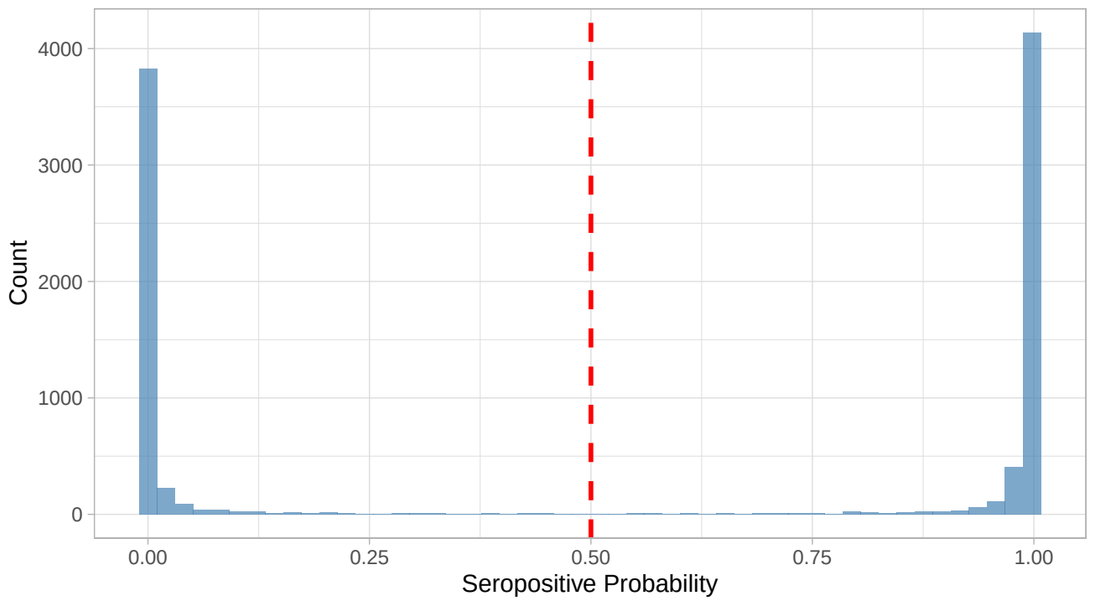

## IgG Level vs Seropositive Probability: cmv_pp52

Red line = hard threshold, Blue line = 50% probability



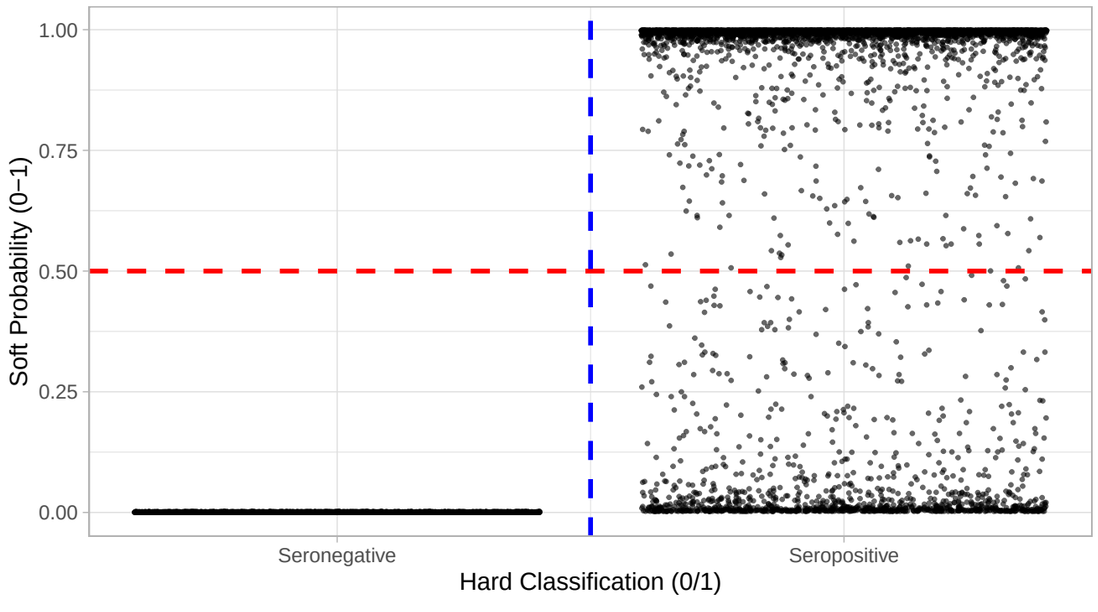

## Distribution of Seropositive Probabilities: cmv_pp52

Red line = 50% threshold



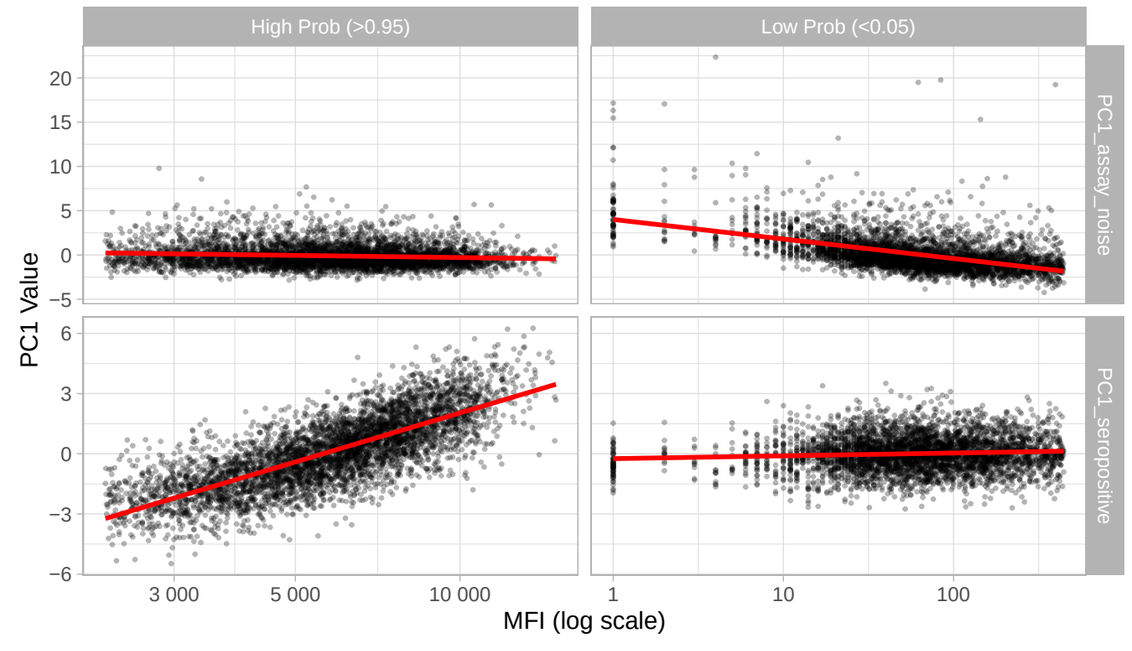

## Hard vs Soft Classification: cmv_pp52

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: cmv_pp52

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

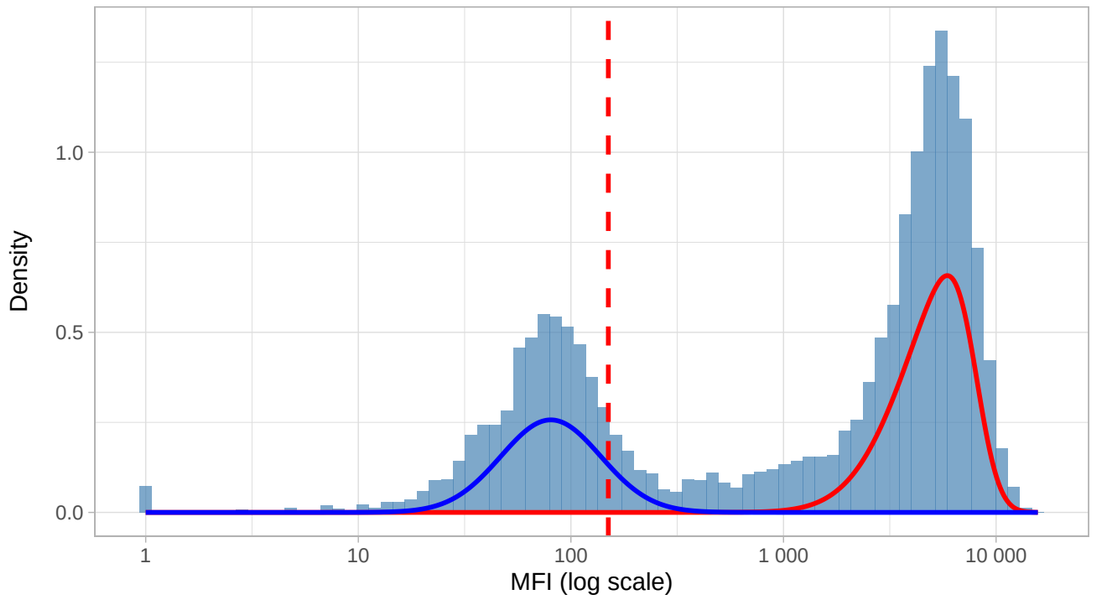


# Diagnostics: hsv1

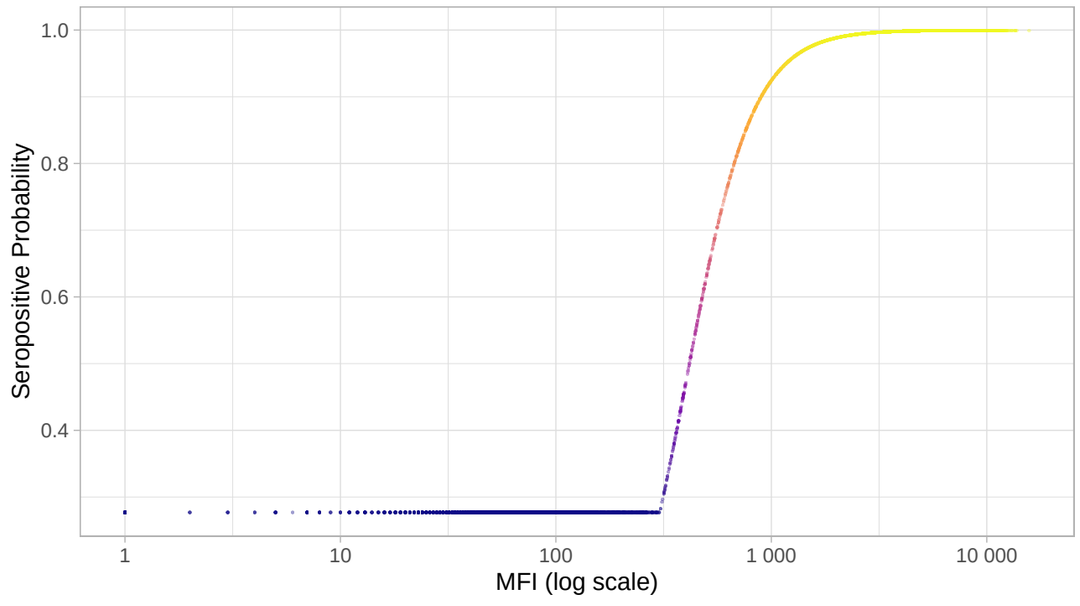
N=9424 | >0.95=5650 | <0.05=0 | Ambig=3774

## Original MFI Distribution: hsv1

Hard cutoff threshold = 150

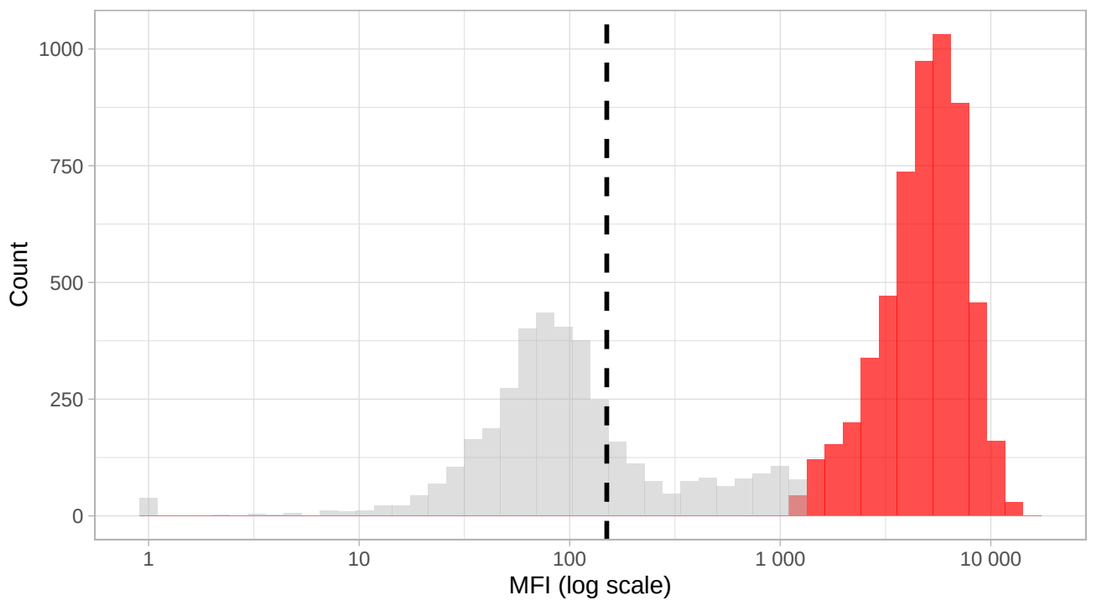



## IgG vs Seropositive Probability: hsv1



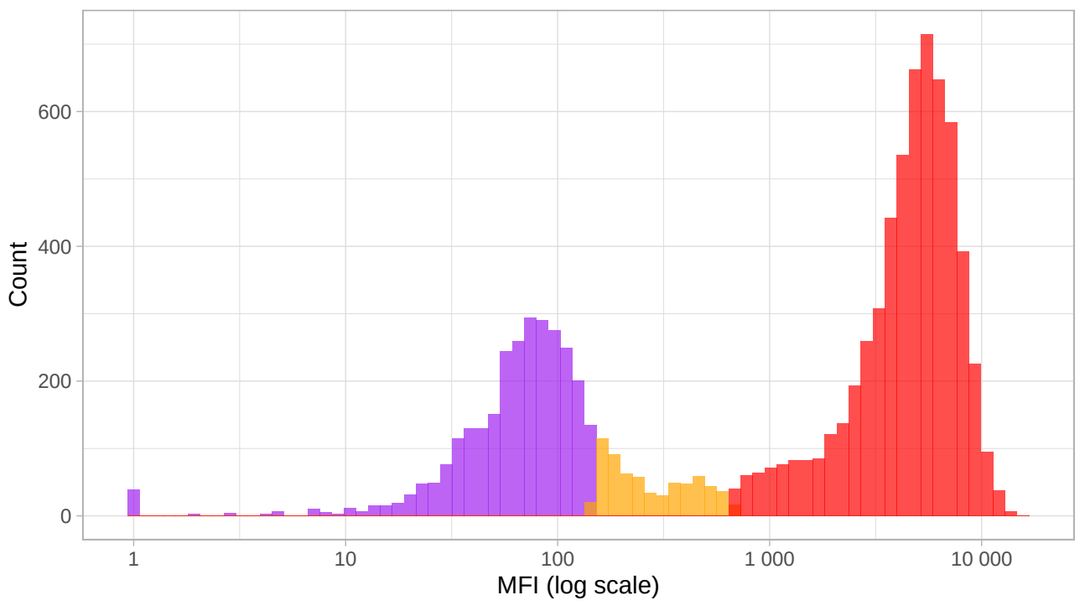

## High−Confidence Seropositive Distribution: hsv1

Prob threshold = 0.96




## Phenotype Distribution by Classification: hsv1

Comparing hard vs soft classifications

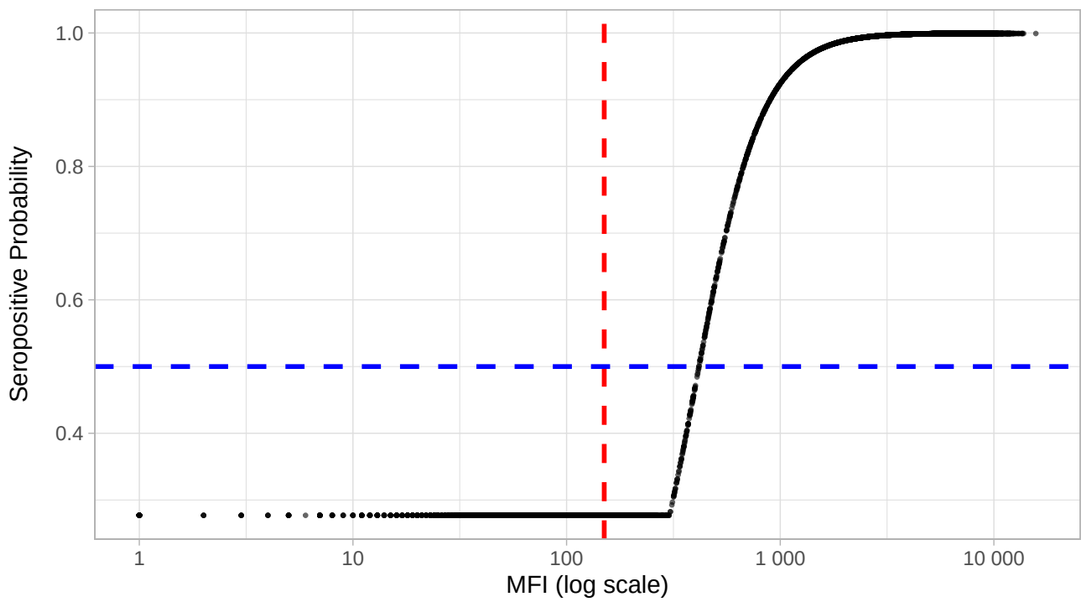






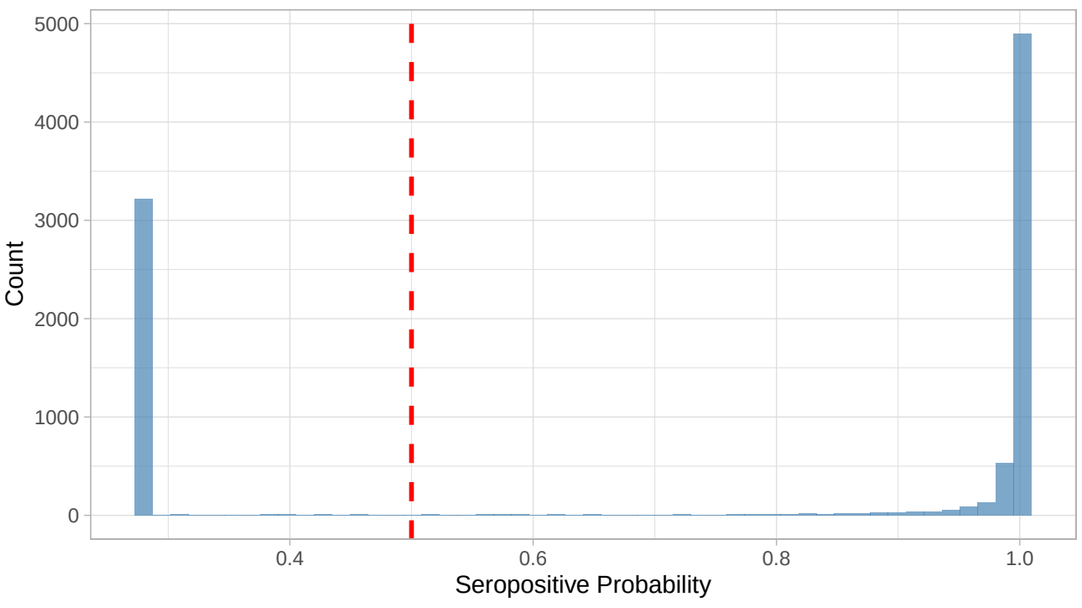
## IgG Level vs Seropositive Probability: hsv1

Red line = hard threshold, Blue line = 50% probability



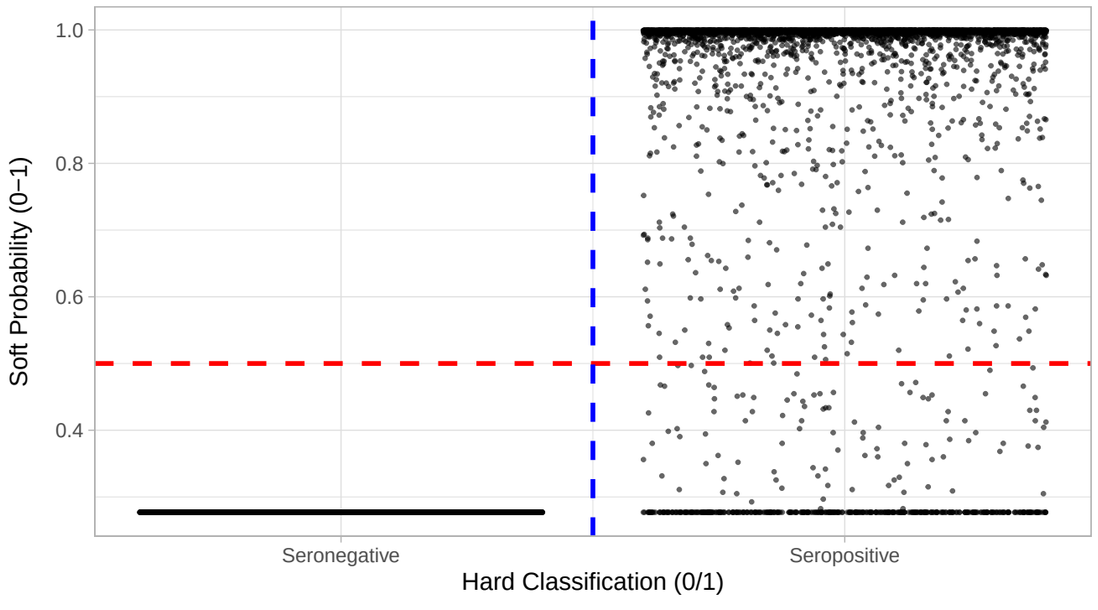

## Distribution of Seropositive Probabilities: hsv1

Red line = 50% threshold



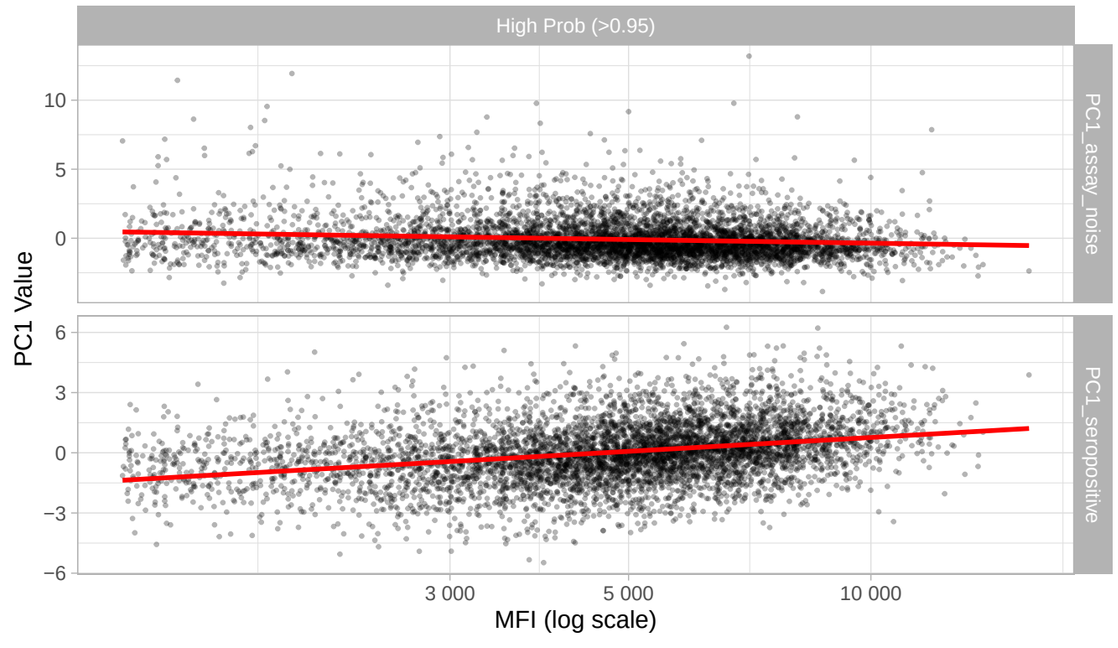

## Hard vs Soft Classification: hsv1

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: hsv1

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

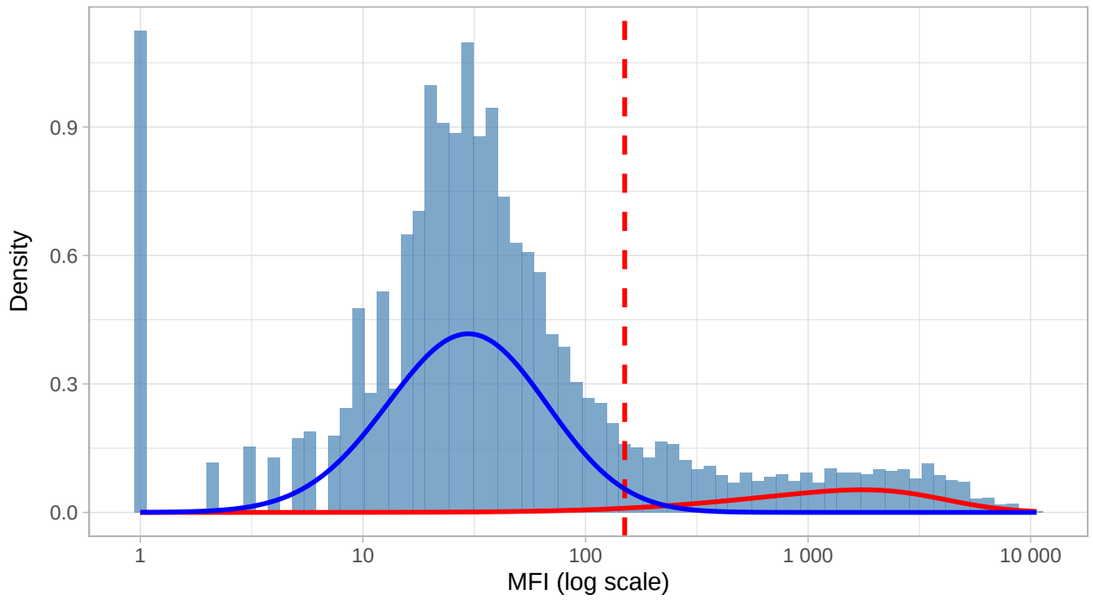


# Diagnostics: hsv2

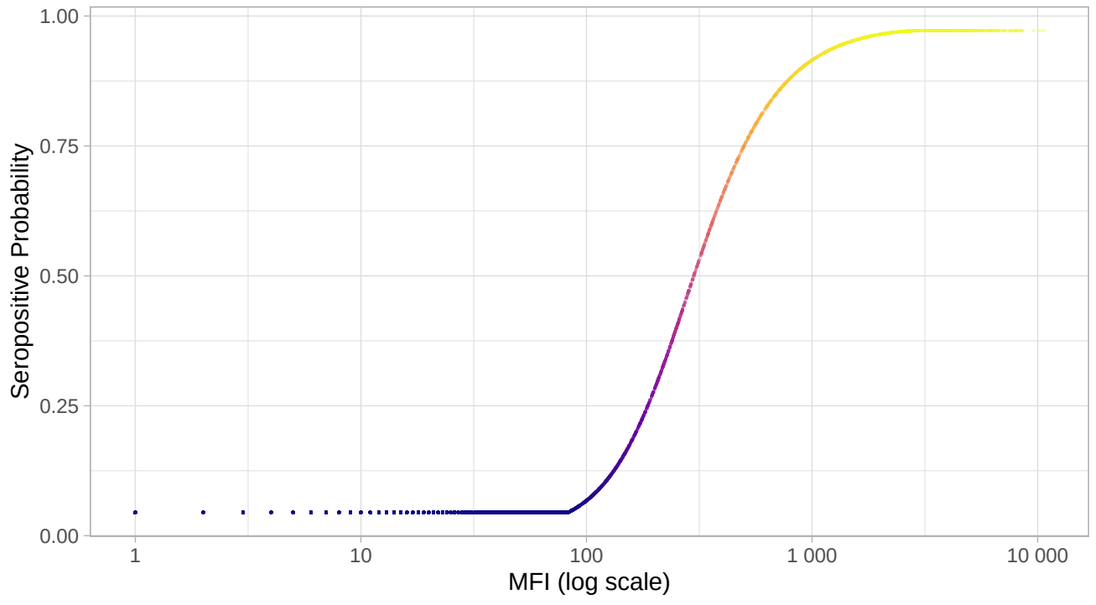
N=9424 | >0.95=540 | <0.05=7361 | Ambig=1523

## Original MFI Distribution: hsv2

Hard cutoff threshold = 150

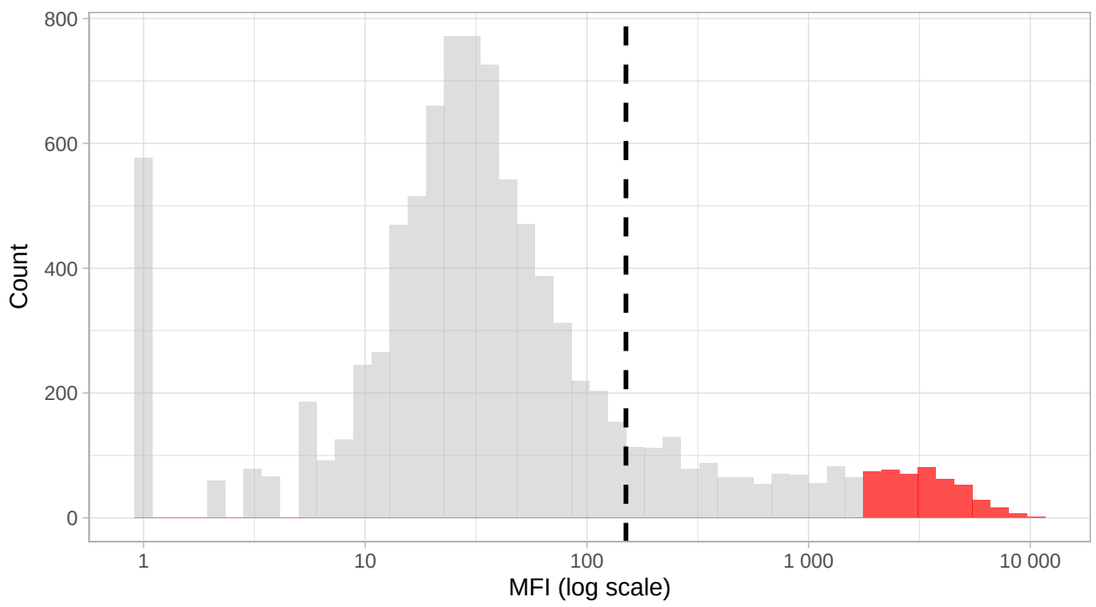



## IgG vs Seropositive Probability: hsv2



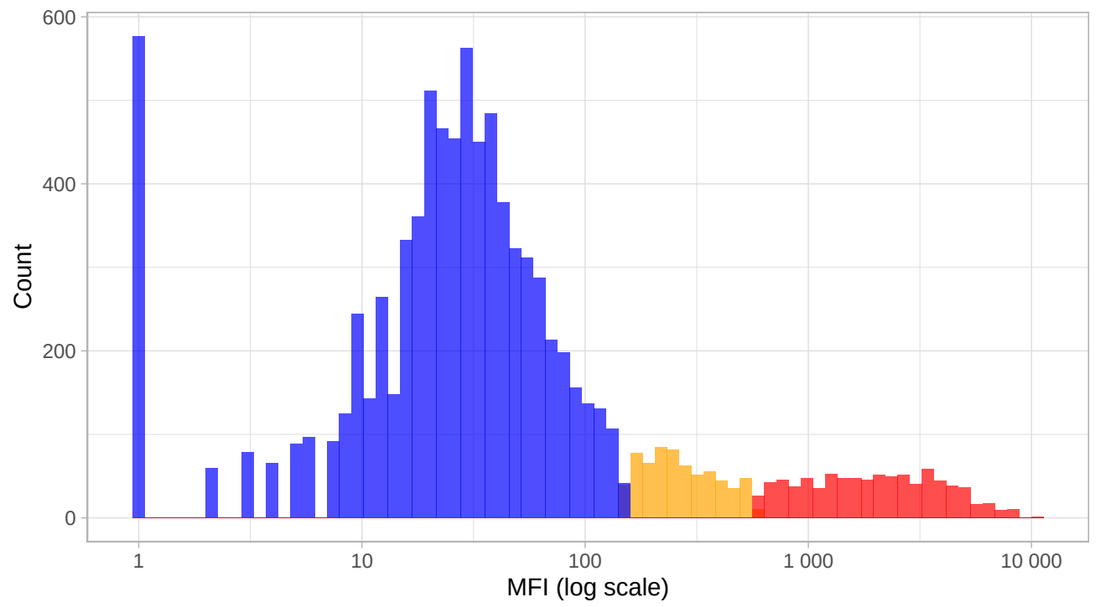

## High−Confidence Seropositive Distribution: hsv2

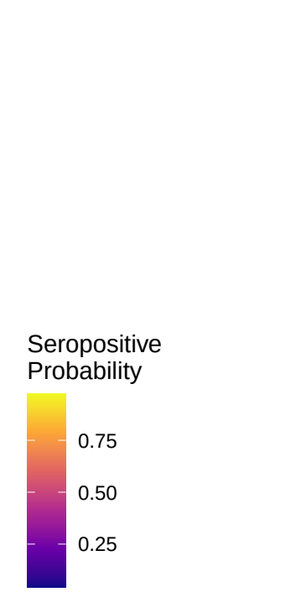
Prob threshold = 0.96




## Phenotype Distribution by Classification: hsv2

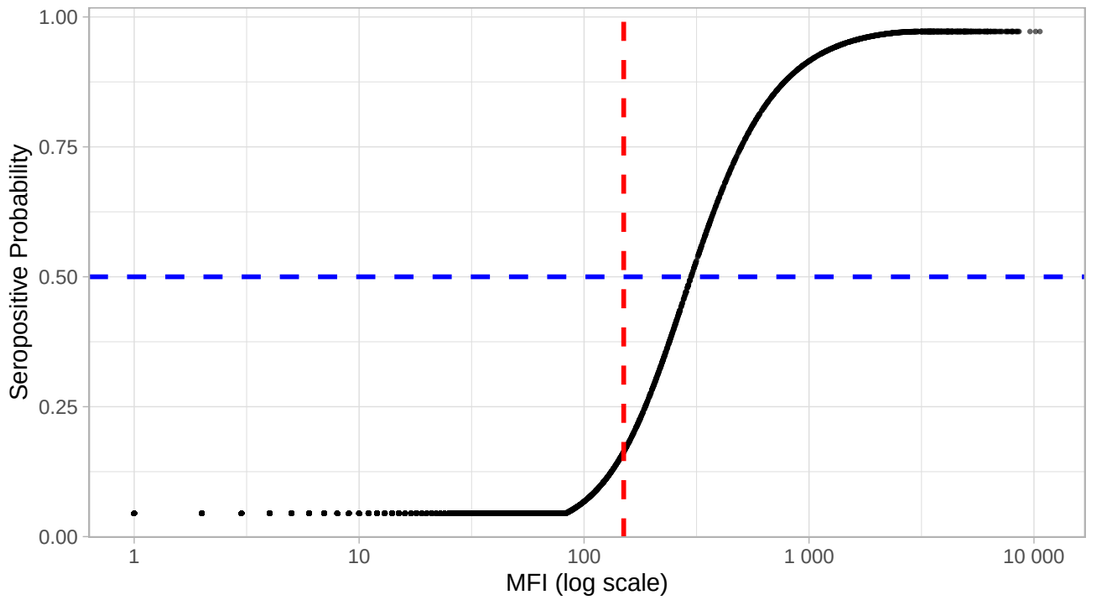
Comparing hard vs soft classifications



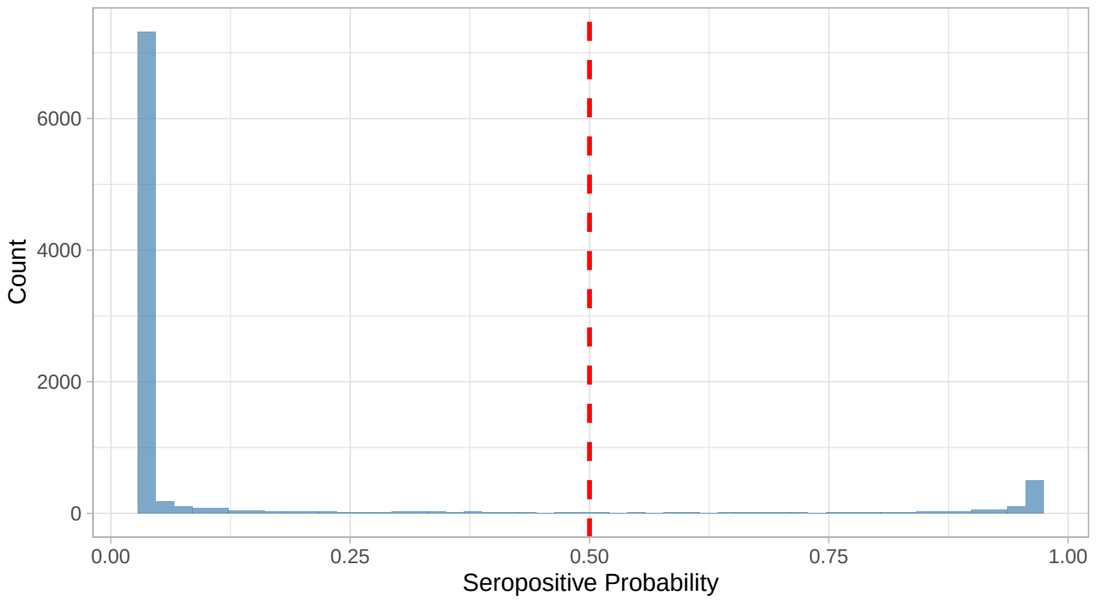

## IgG Level vs Seropositive Probability: hsv2

Red line = hard threshold, Blue line = 50% probability



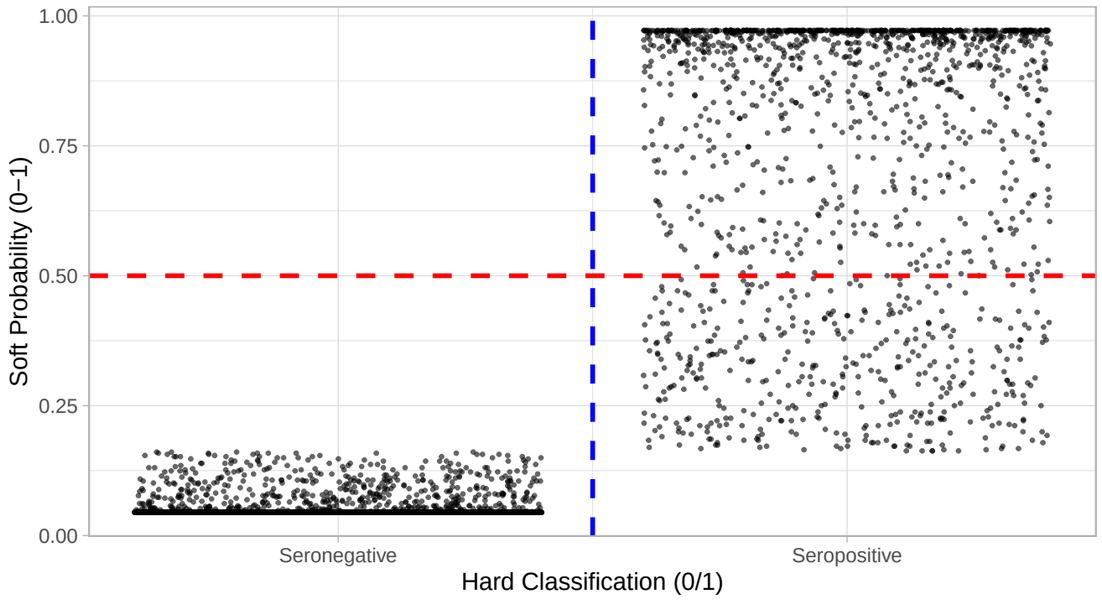

## Distribution of Seropositive Probabilities: hsv2

Red line = 50% threshold



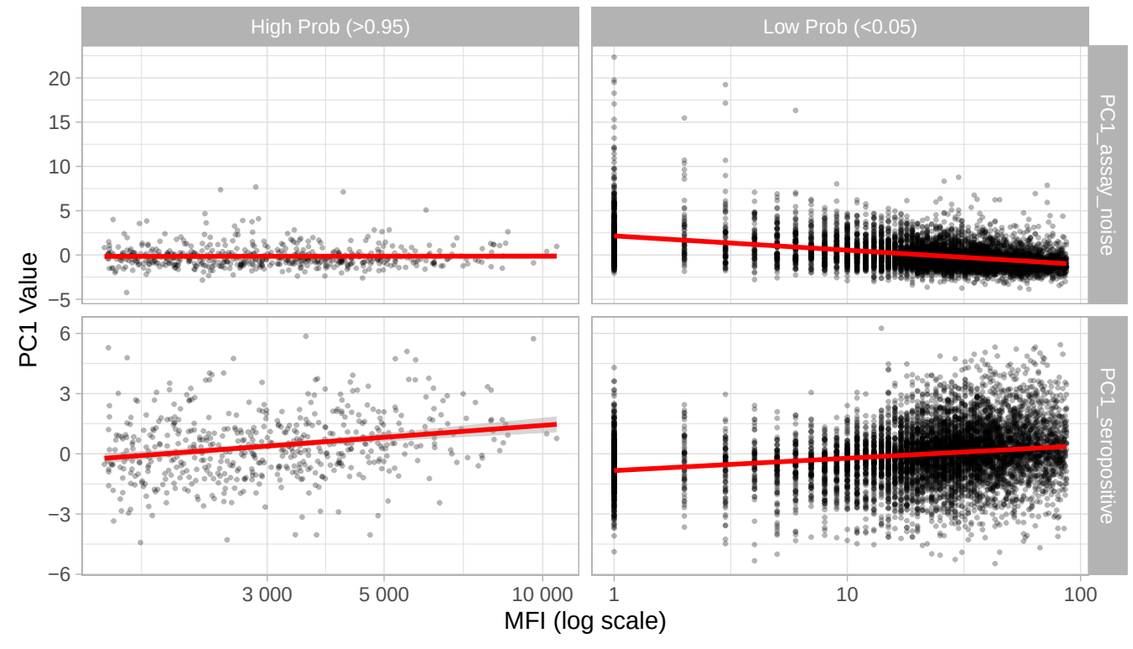

## Hard vs Soft Classification: hsv2

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: hsv2

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

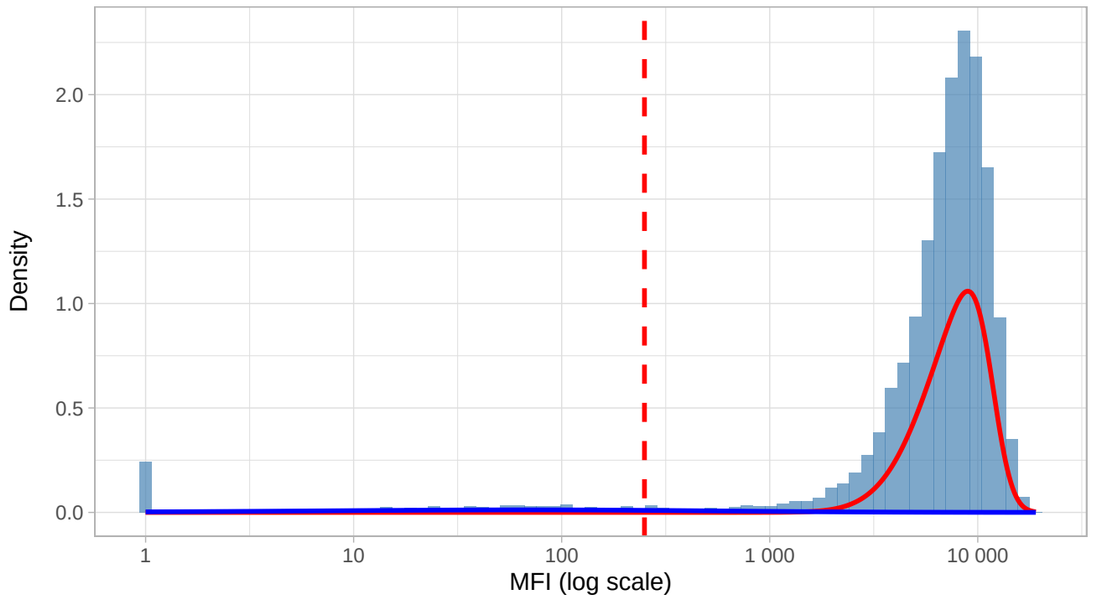


# Diagnostics: ebv_vca

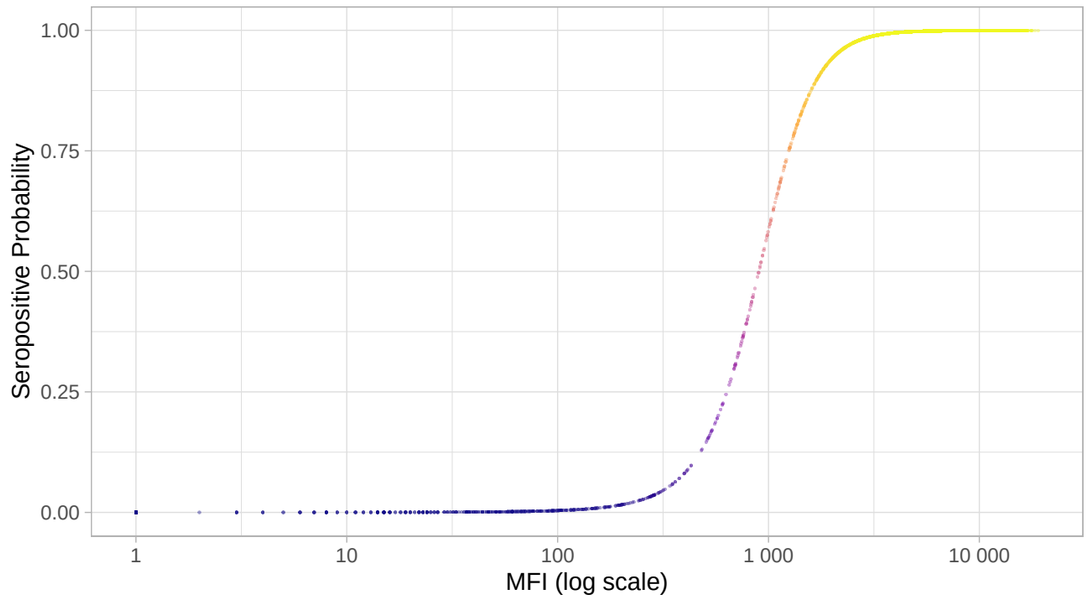
N=9424 | >0.95=8641 | <0.05=502 | Ambig=281

## Original MFI Distribution: ebv_vca

Hard cutoff threshold = 250

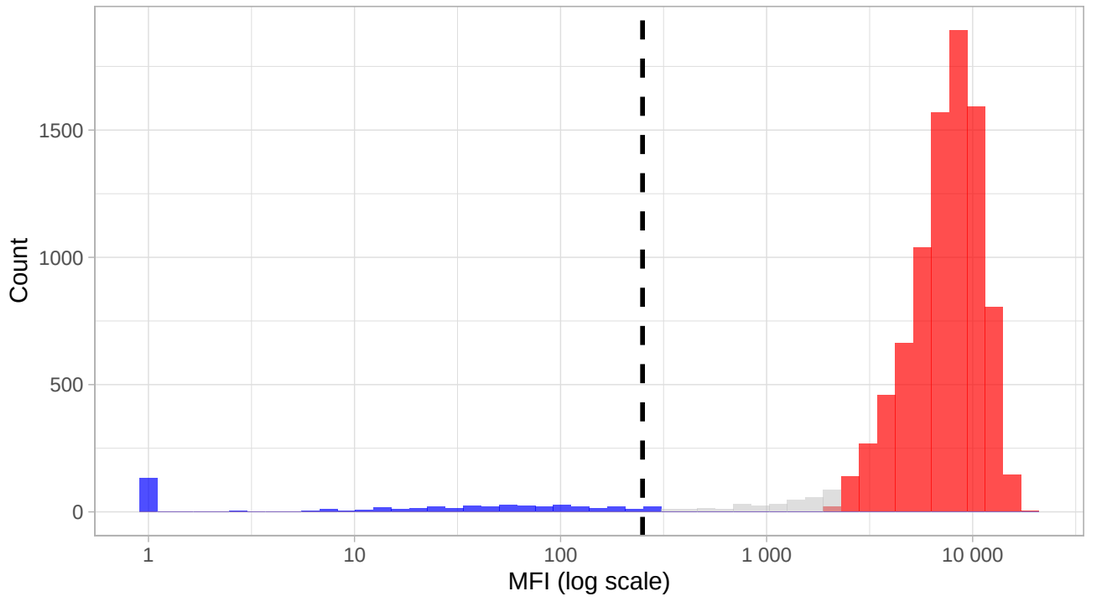



## IgG vs Seropositive Probability: ebv_vca



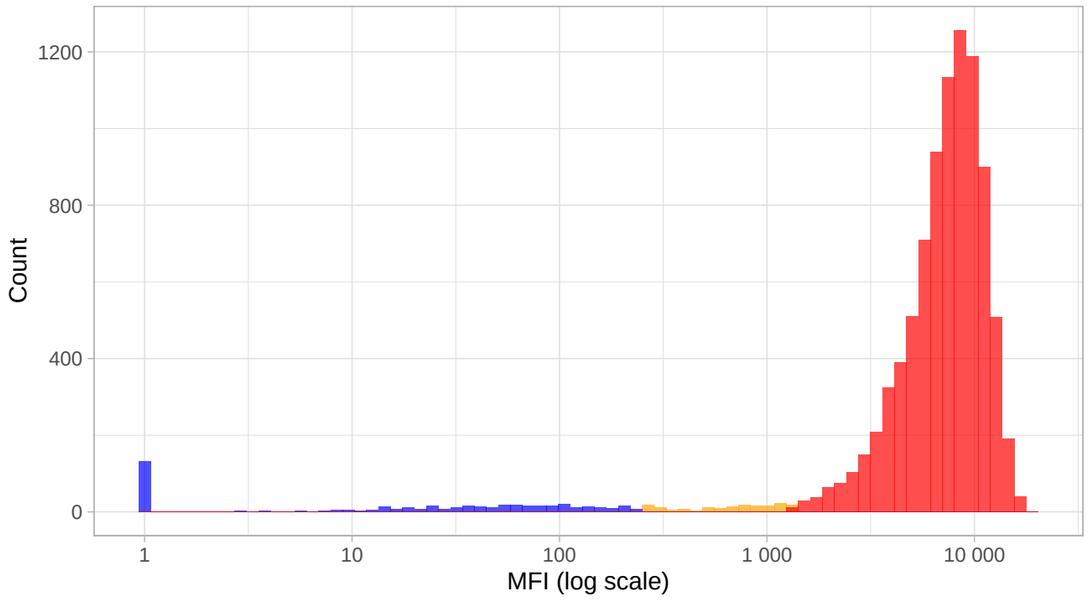

## High−Confidence Seropositive Distribution: ebv_vca

Prob threshold = 0.96



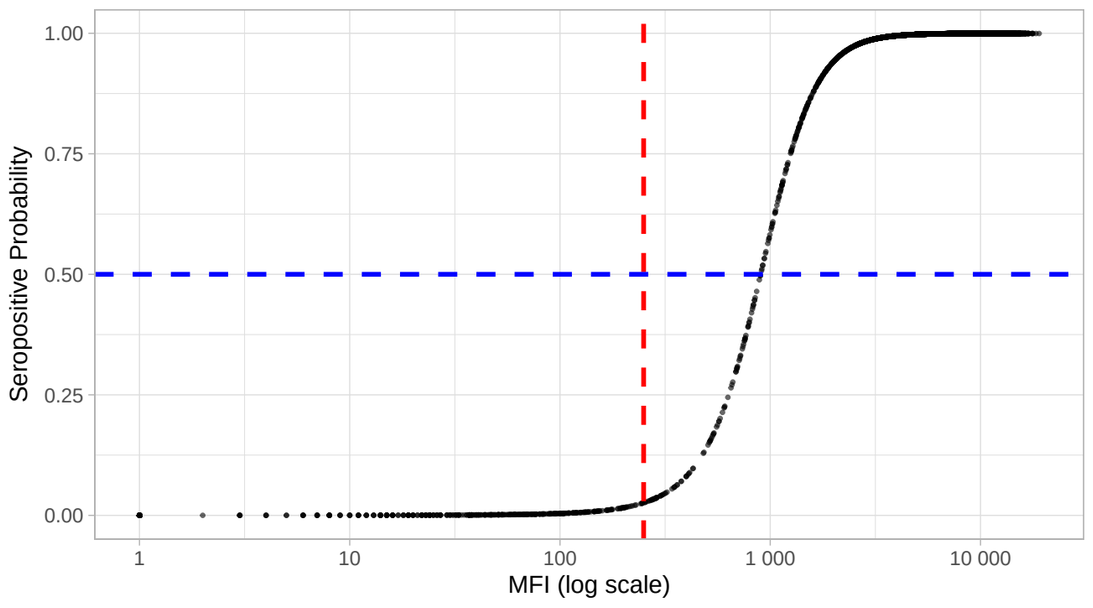

## Phenotype Distribution by Classification: ebv_vca

Comparing hard vs soft classifications



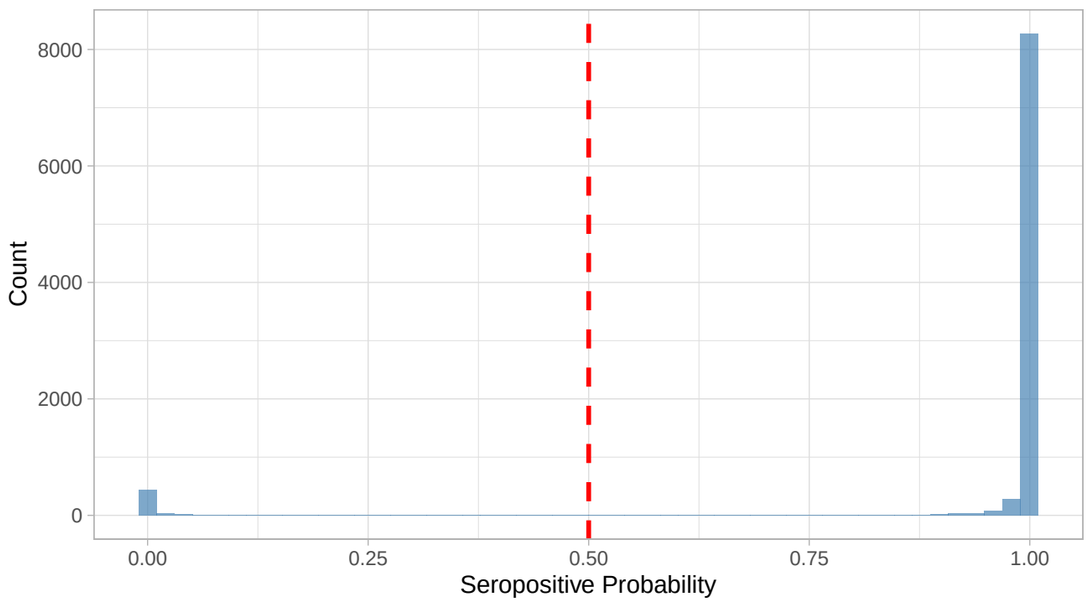

## IgG Level vs Seropositive Probability: ebv_vca

Red line = hard threshold, Blue line = 50% probability



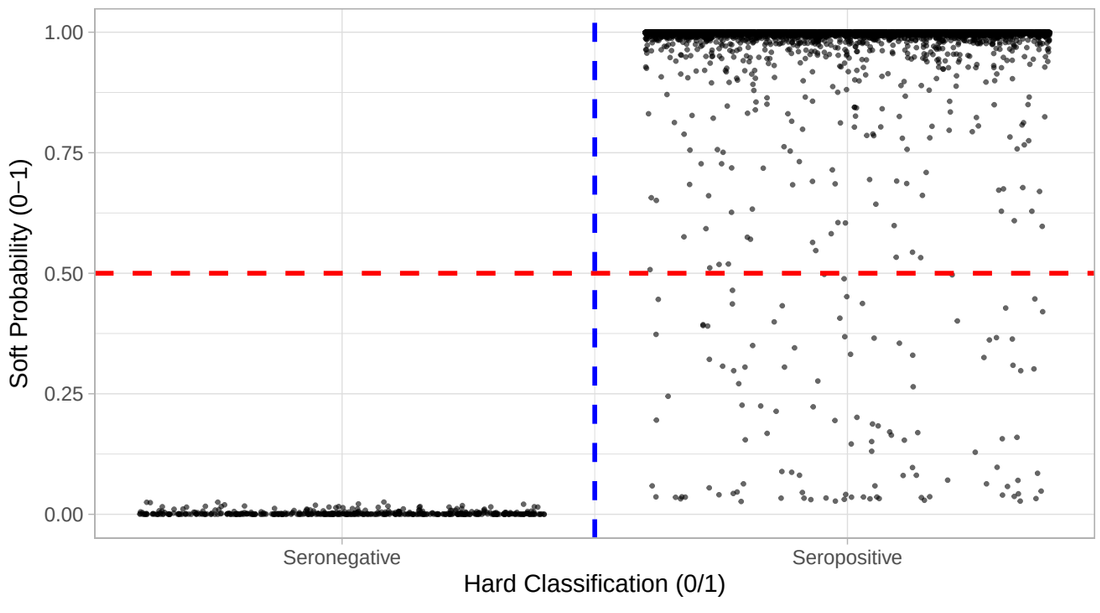

## Distribution of Seropositive Probabilities: ebv_vca

Red line = 50% threshold



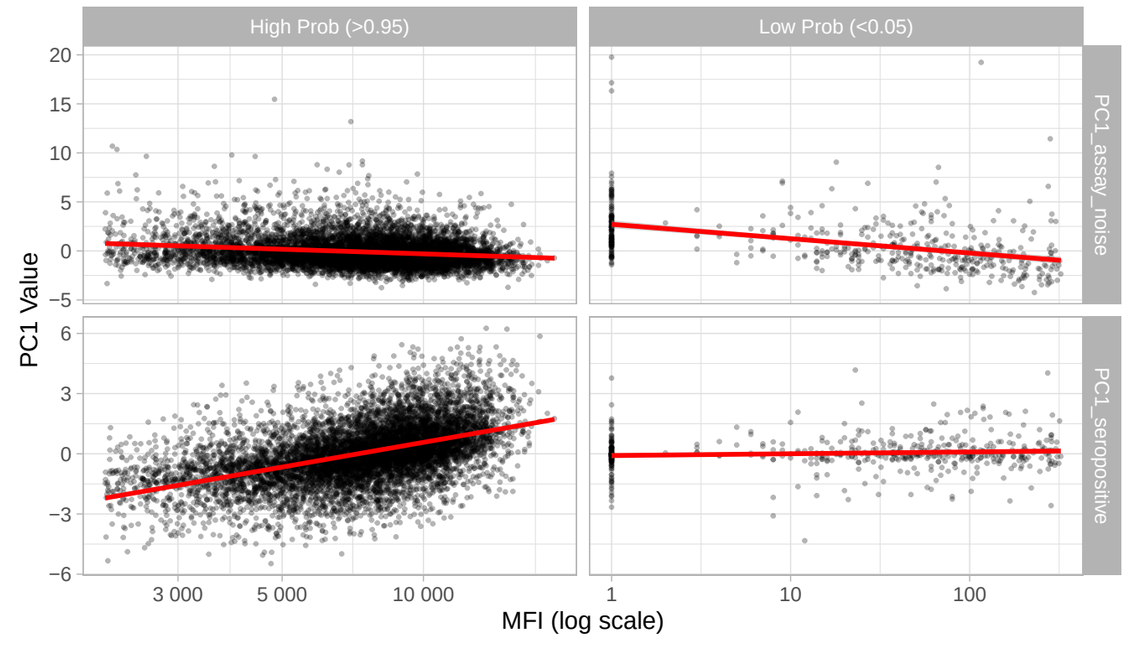

## Hard vs Soft Classification: ebv_vca

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: ebv_vca

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

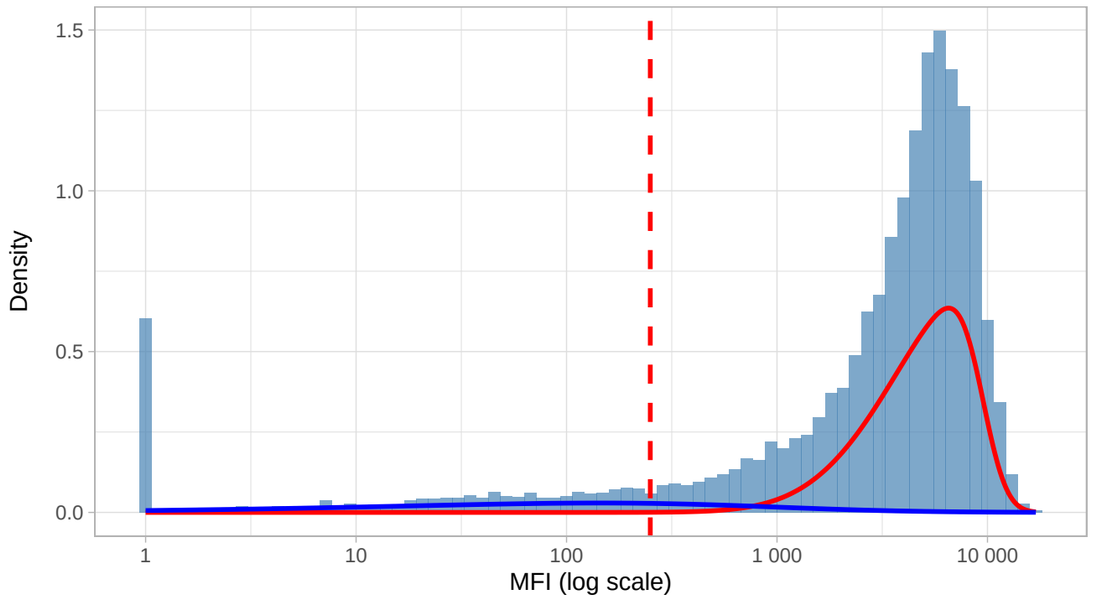


# Diagnostics: ebv_ebna1

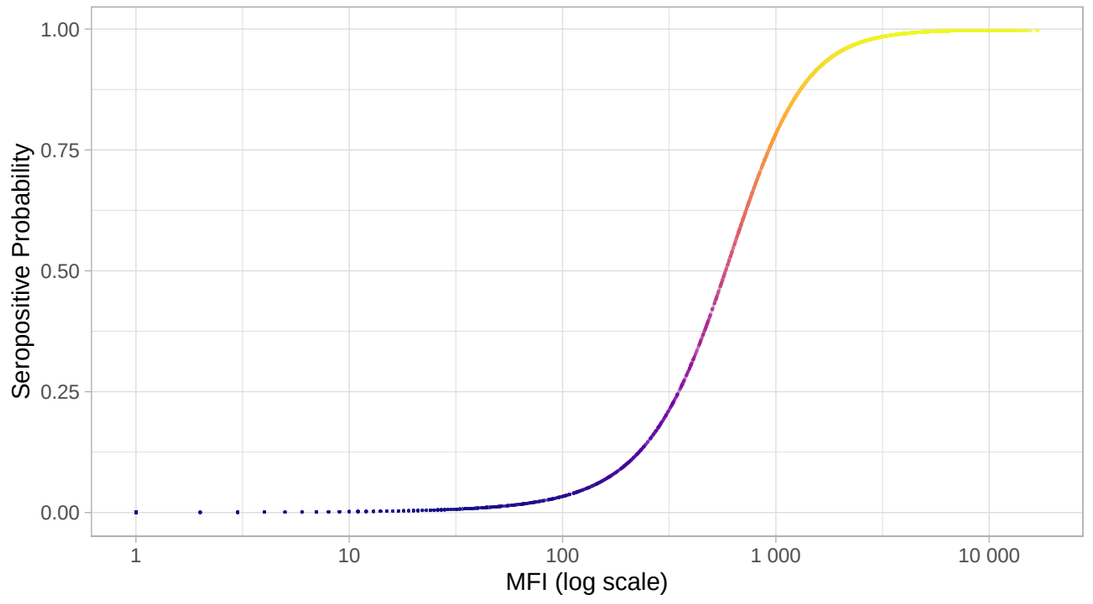
N=9424 | >0.95=6946 | <0.05=864 | Ambig=1614

## Original MFI Distribution: ebv_ebna1

Hard cutoff threshold = 250

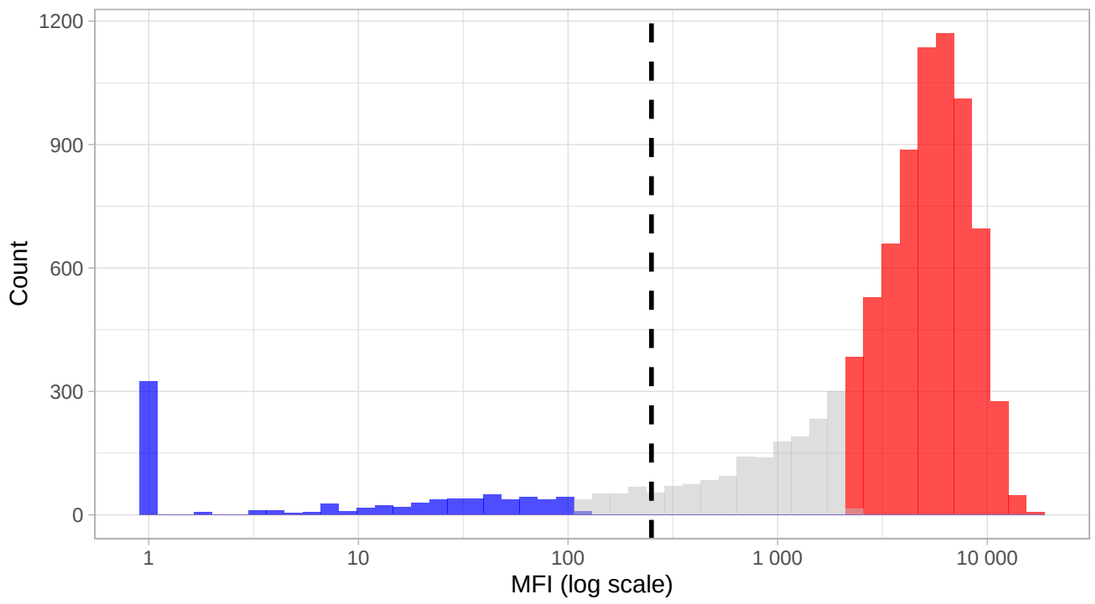



## IgG vs Seropositive Probability: ebv_ebna1



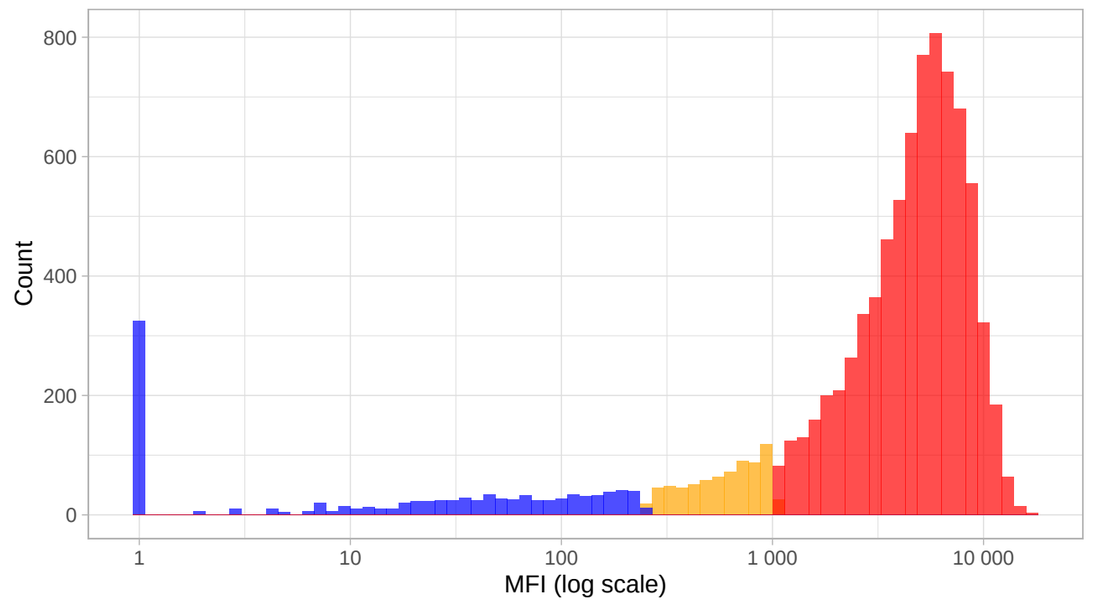

## High−Confidence Seropositive Distribution: ebv_ebna1

Prob threshold = 0.96



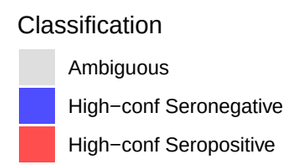

## Phenotype Distribution by Classification: ebv_ebna1

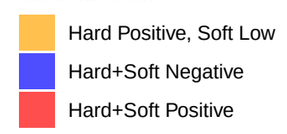
Comparing hard vs soft classifications





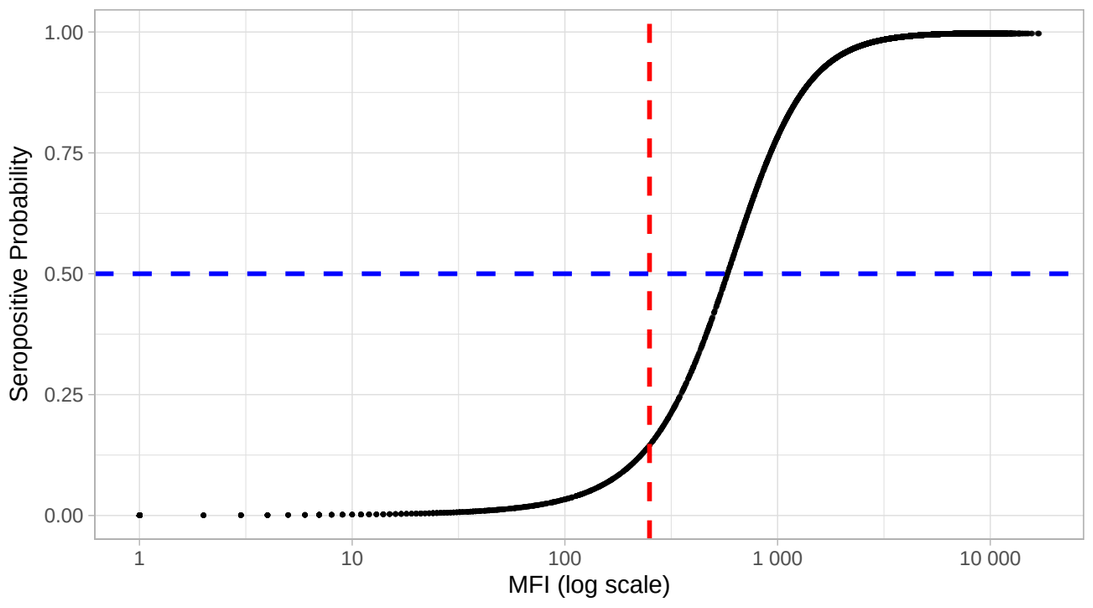




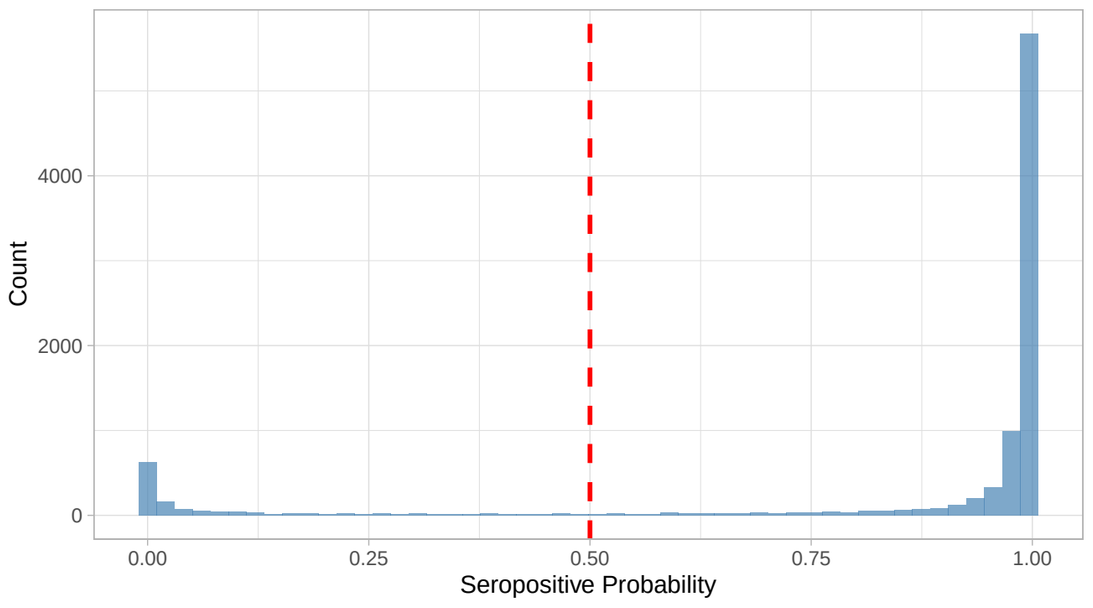

## IgG Level vs Seropositive Probability: ebv_ebna1

Red line = hard threshold, Blue line = 50% probability



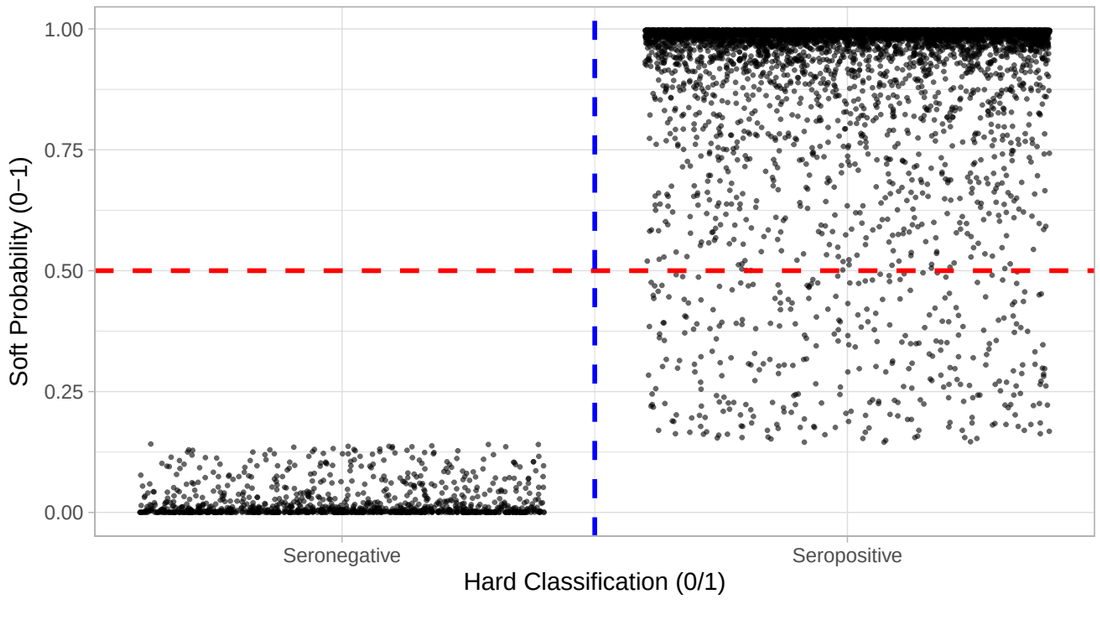

## Distribution of Seropositive Probabilities: ebv_ebna1

Red line = 50% threshold



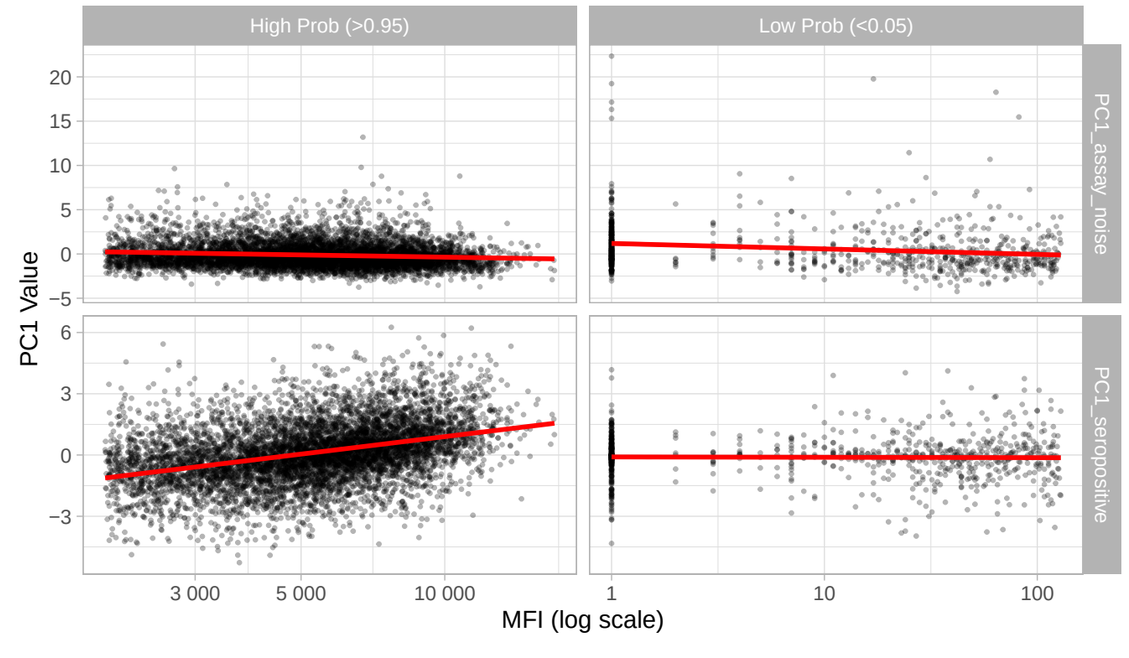

## Hard vs Soft Classification: ebv_ebna1

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: ebv_ebna1

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

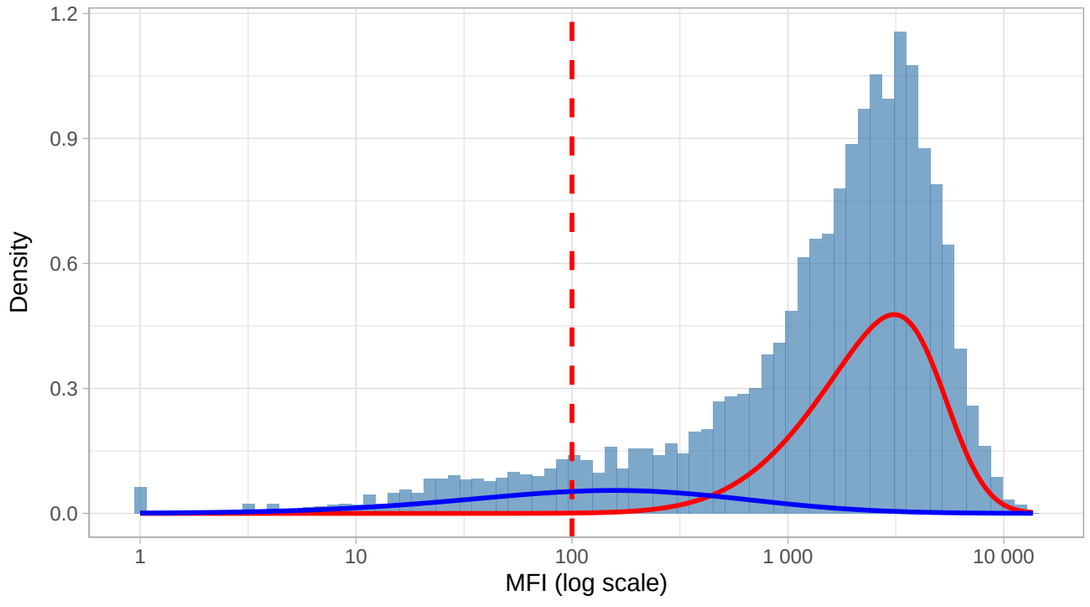


# Diagnostics: ebv_zebra

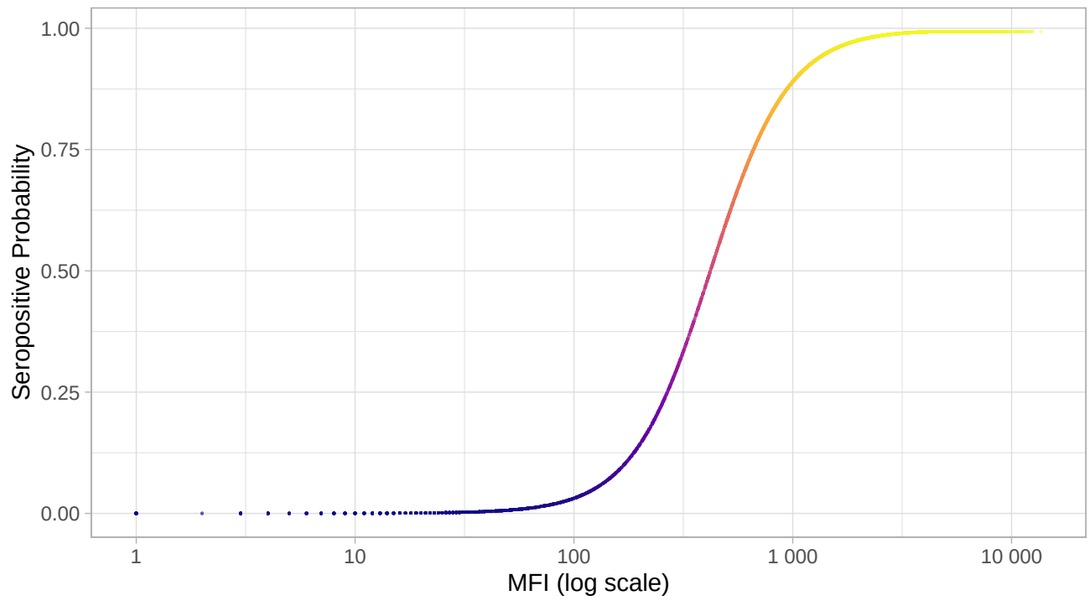
N=9424 | >0.95=5705 | <0.05=950 | Ambig=2769

## Original MFI Distribution: ebv_zebra

Hard cutoff threshold = 100

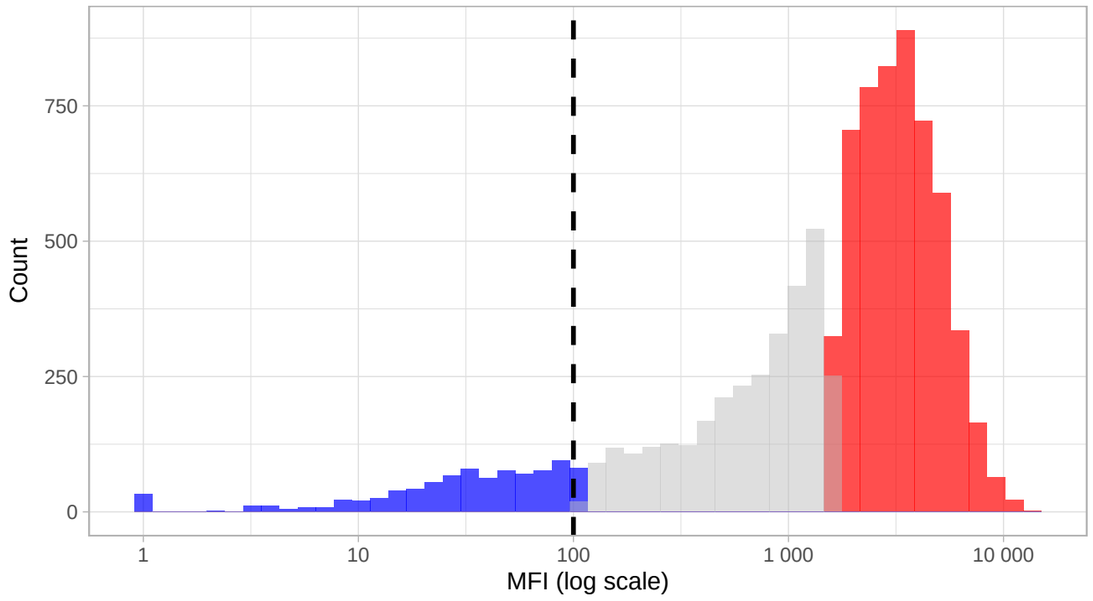



## IgG vs Seropositive Probability: ebv_zebra



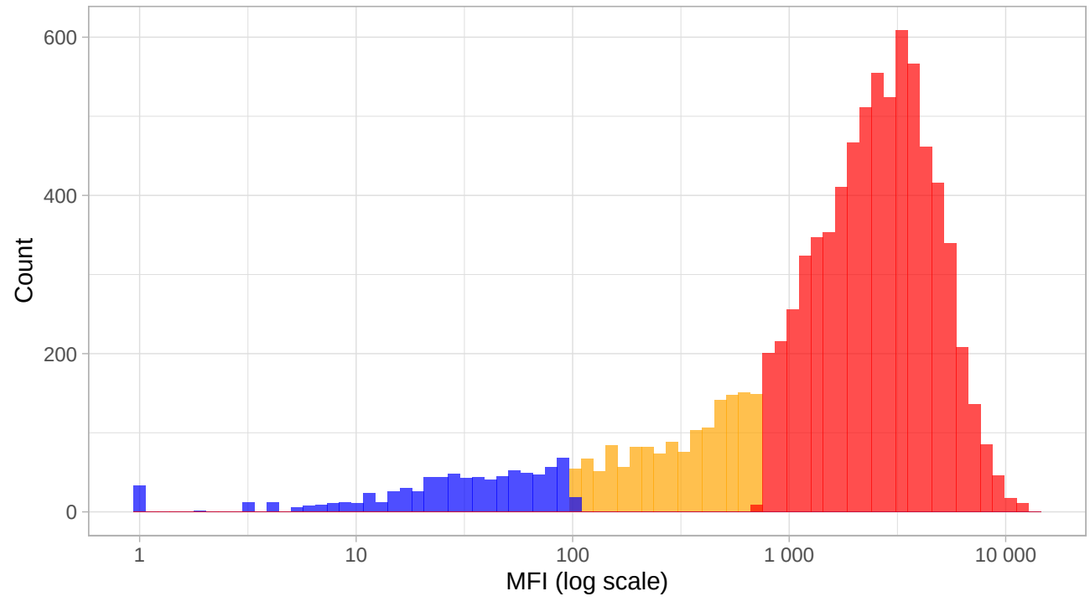

## High−Confidence Seropositive Distribution: ebv_zebra

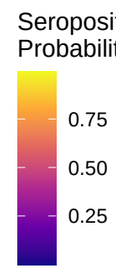
Prob threshold = 0.96




## Phenotype Distribution by Classification: ebv_zebra

Comparing hard vs soft classifications



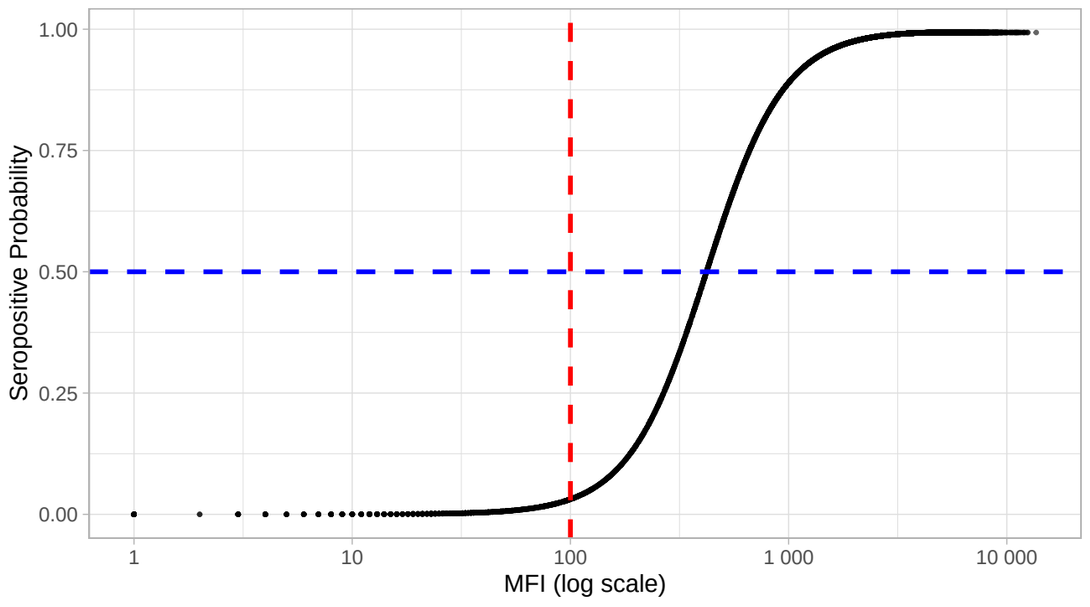







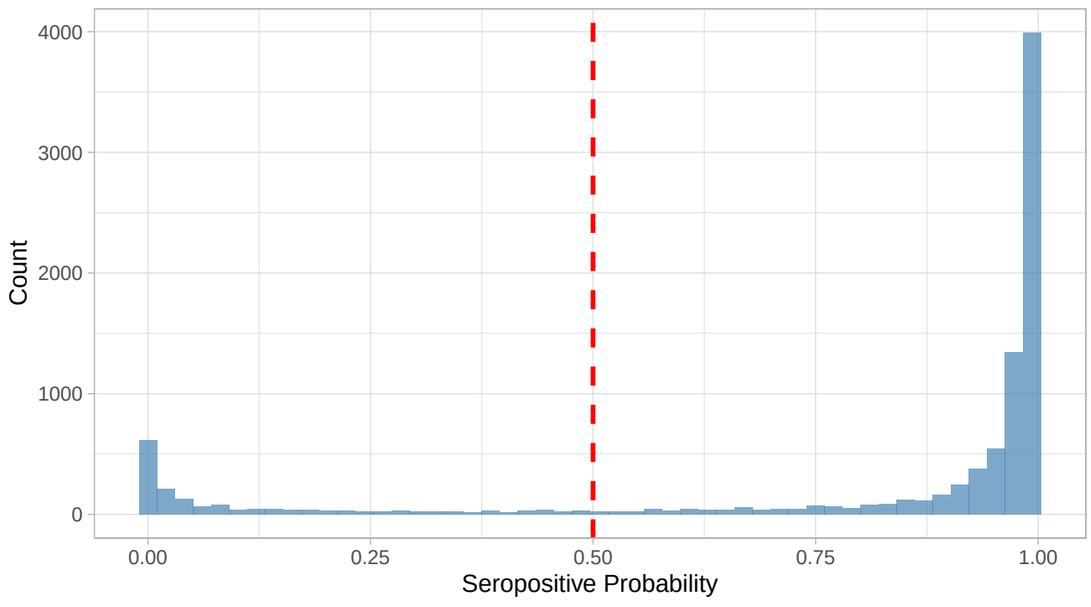

## IgG Level vs Seropositive Probability: ebv_zebra

Red line = hard threshold, Blue line = 50% probability



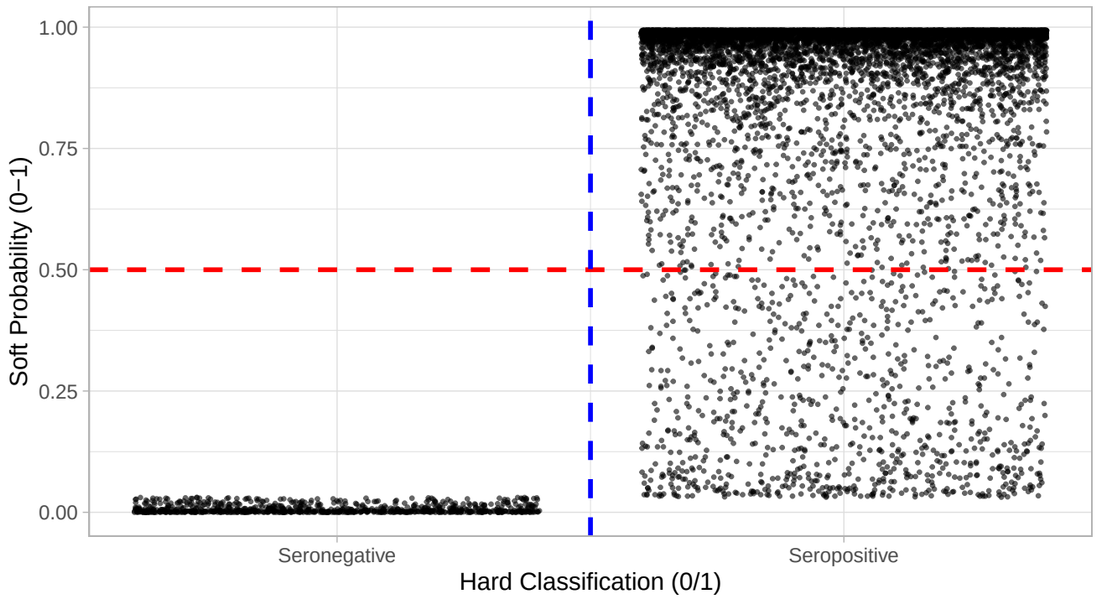

## Distribution of Seropositive Probabilities: ebv_zebra

Red line = 50% threshold



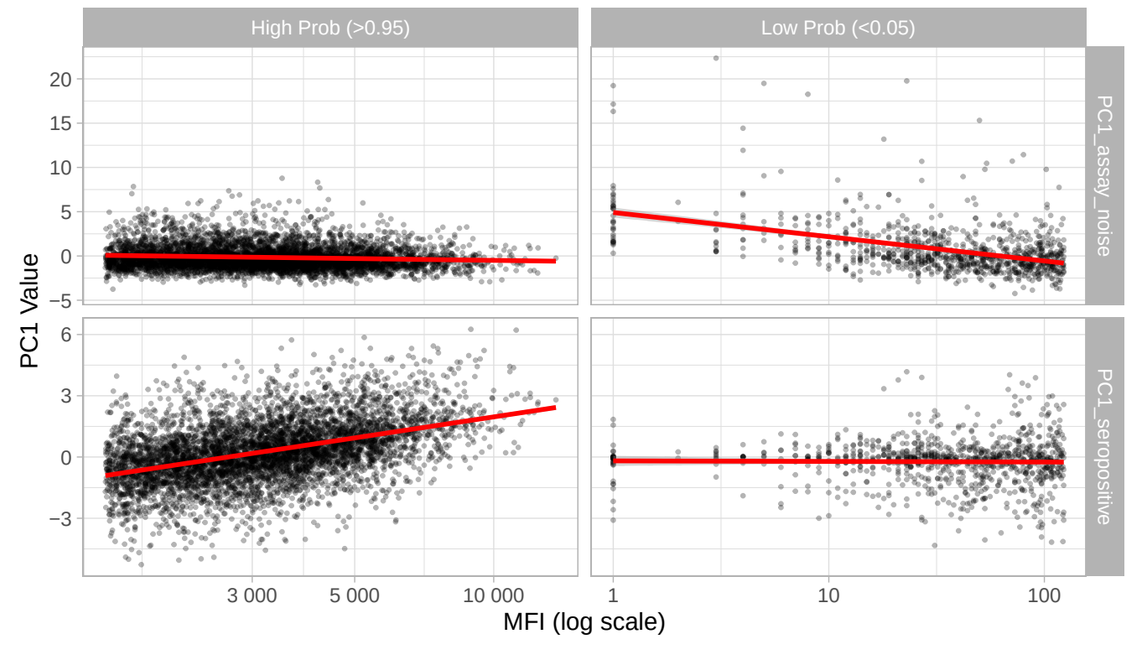

## Hard vs Soft Classification: ebv_zebra

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: ebv_zebra

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

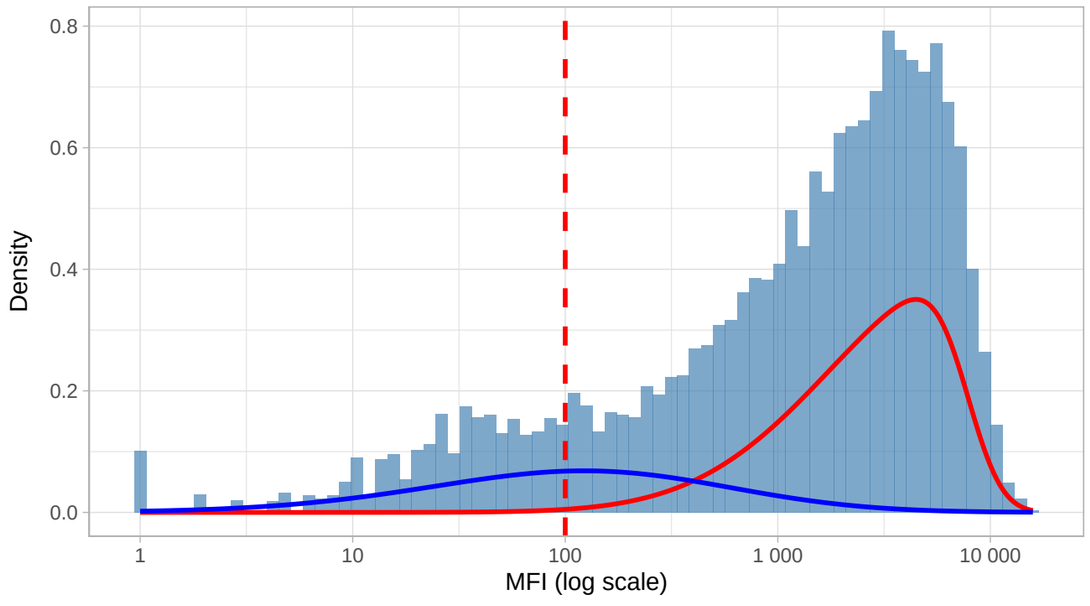


# Diagnostics: ebv_ead

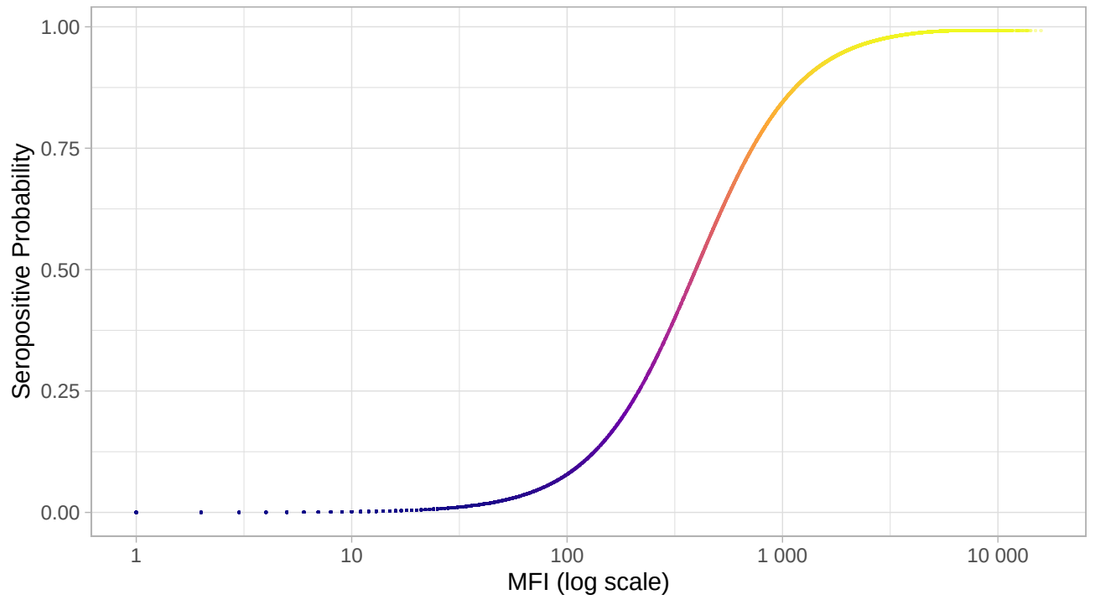
N=9424 | >0.95=4388 | <0.05=1148 | Ambig=3888

## Original MFI Distribution: ebv_ead

Hard cutoff threshold = 100

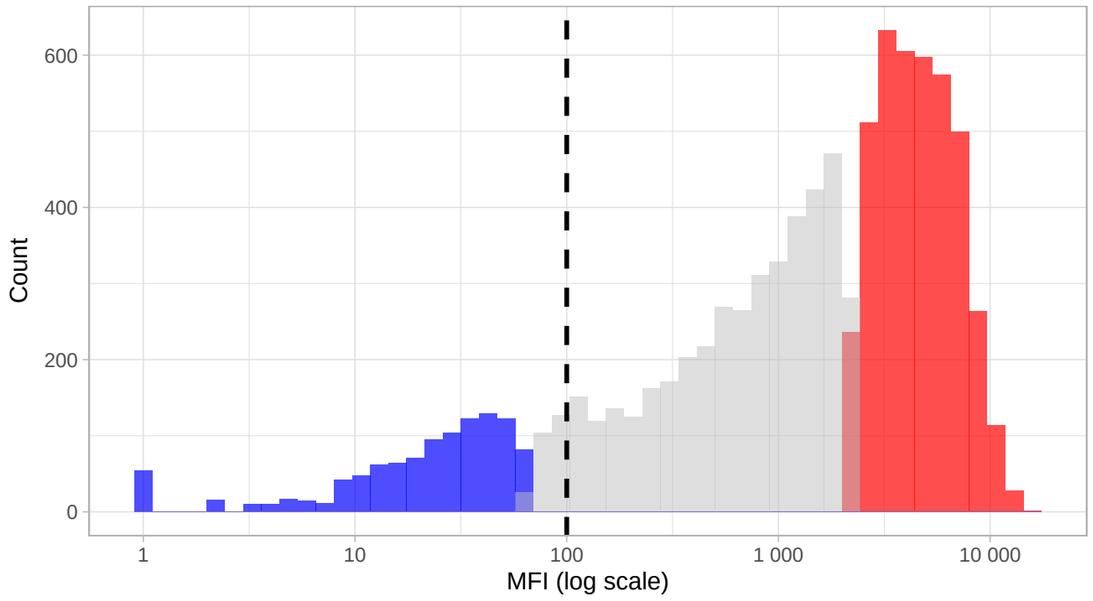



## IgG vs Seropositive Probability: ebv_ead



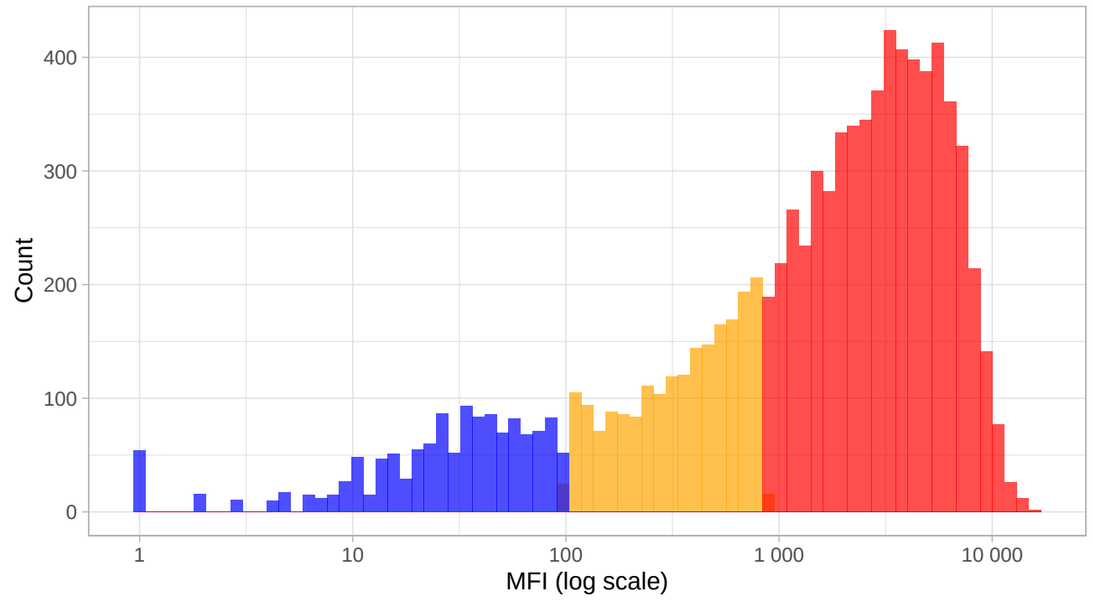

## High−Confidence Seropositive Distribution: ebv_ead

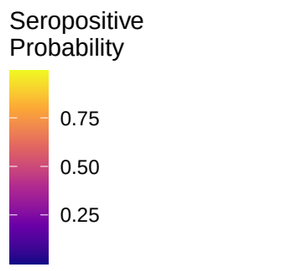
Prob threshold = 0.96




## Phenotype Distribution by Classification: ebv_ead

Comparing hard vs soft classifications



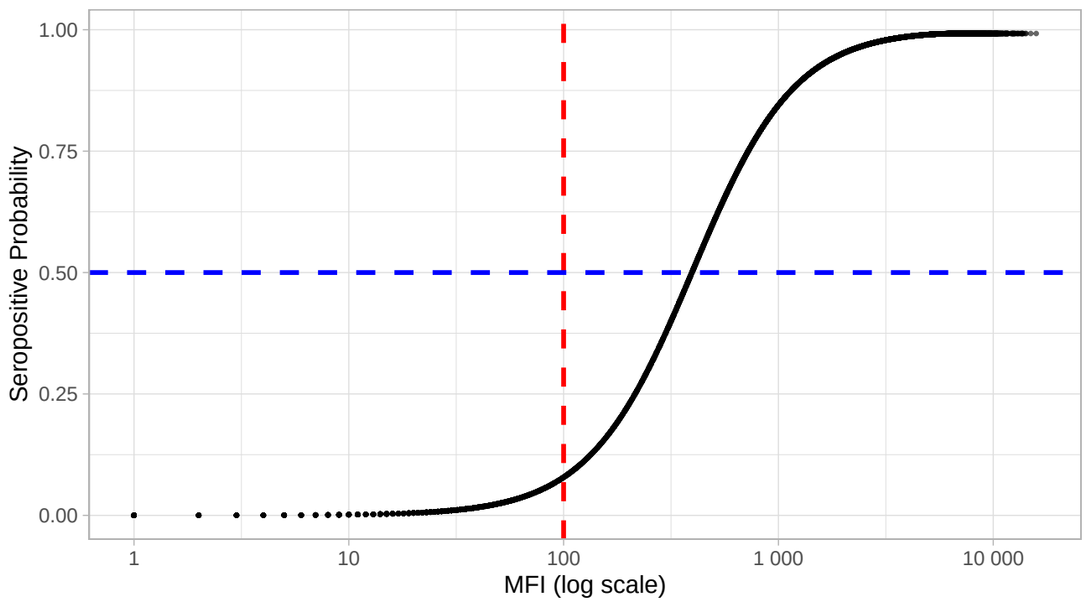







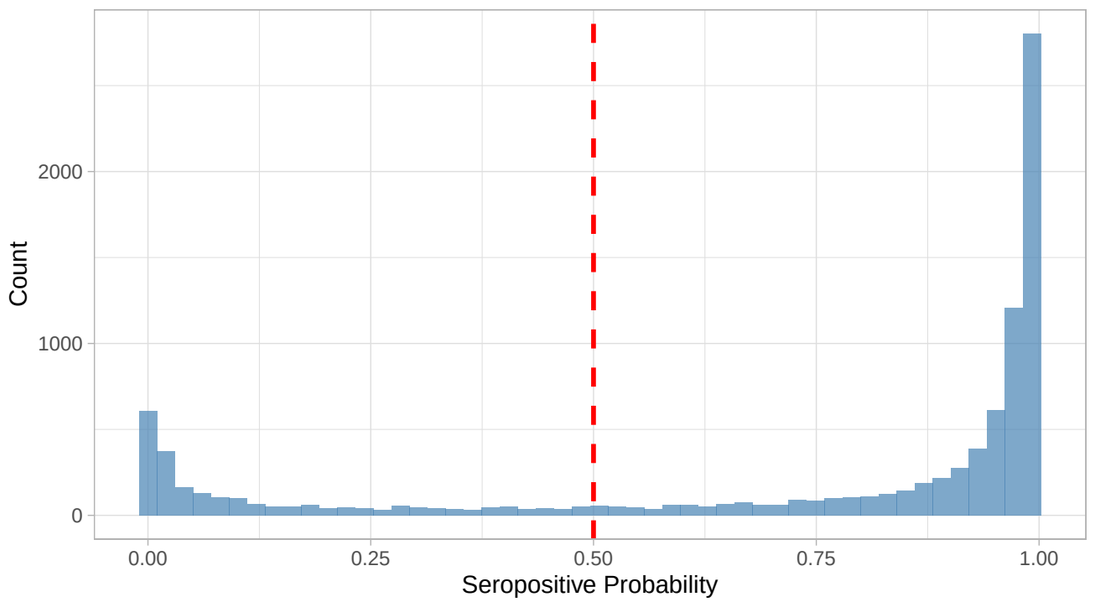

## IgG Level vs Seropositive Probability: ebv_ead

Red line = hard threshold, Blue line = 50% probability



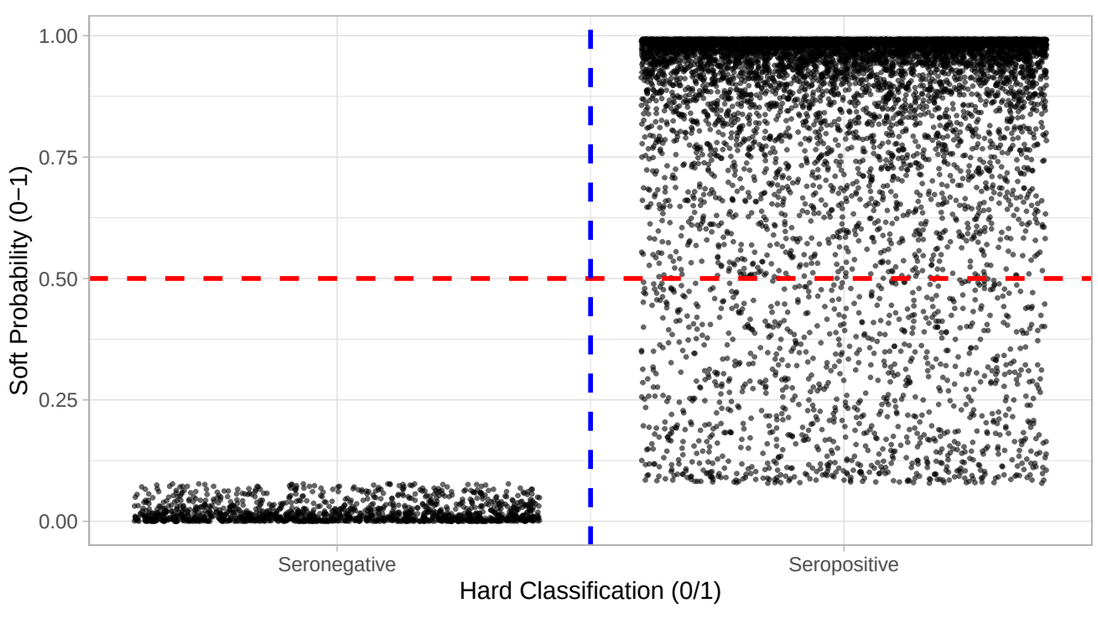

## Distribution of Seropositive Probabilities: ebv_ead

Red line = 50% threshold



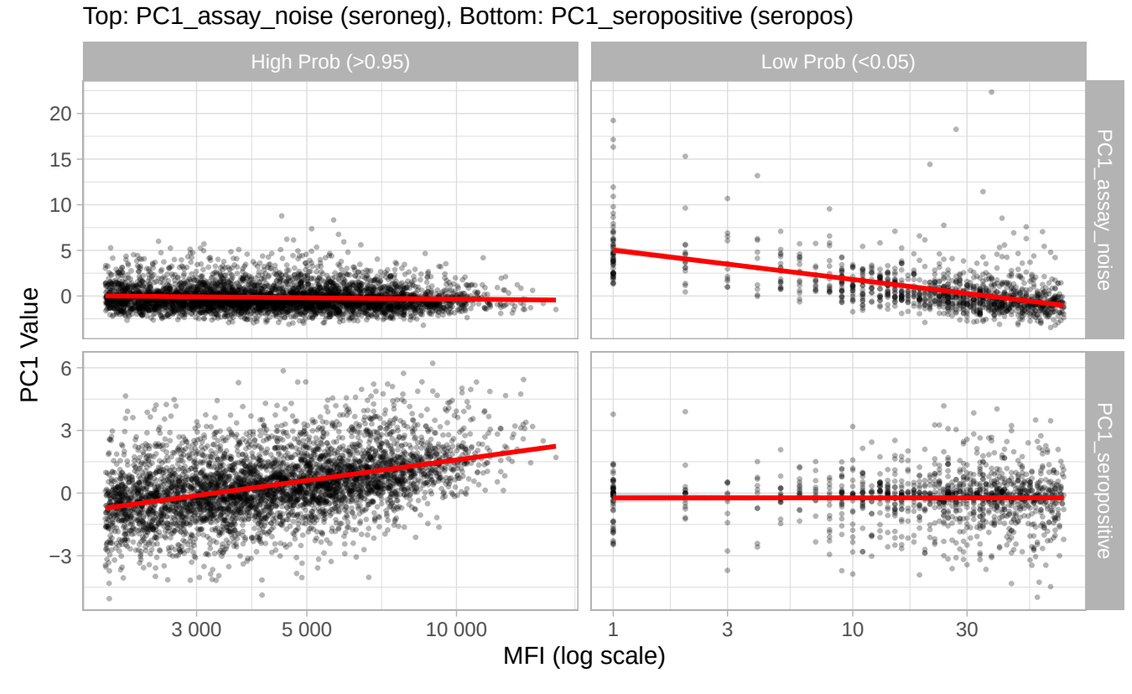

## Hard vs Soft Classification: ebv_ead

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: ebv_ead

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

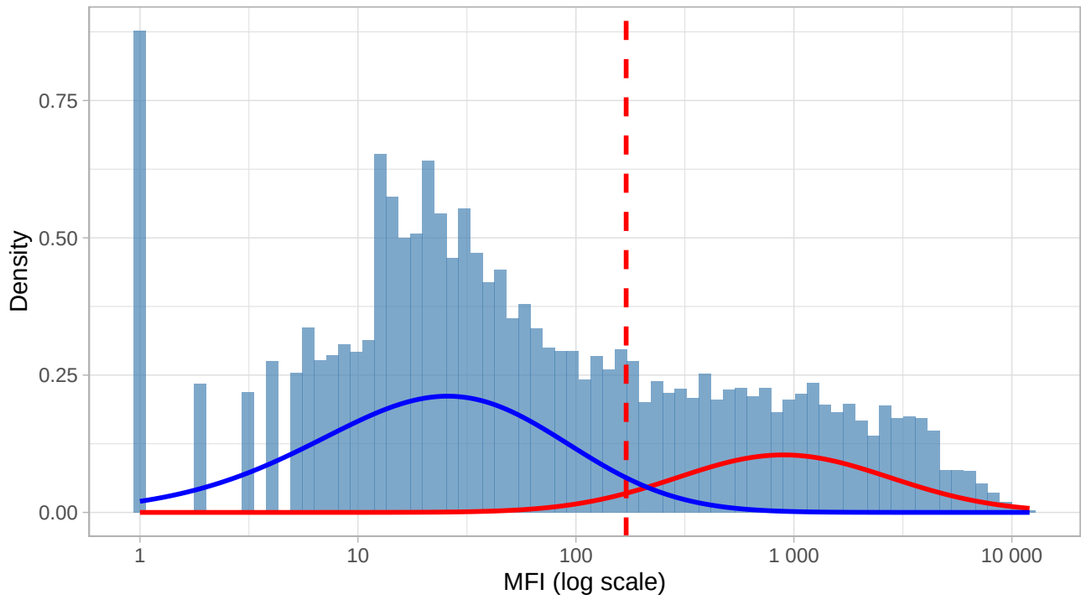


# Diagnostics: hp_omp

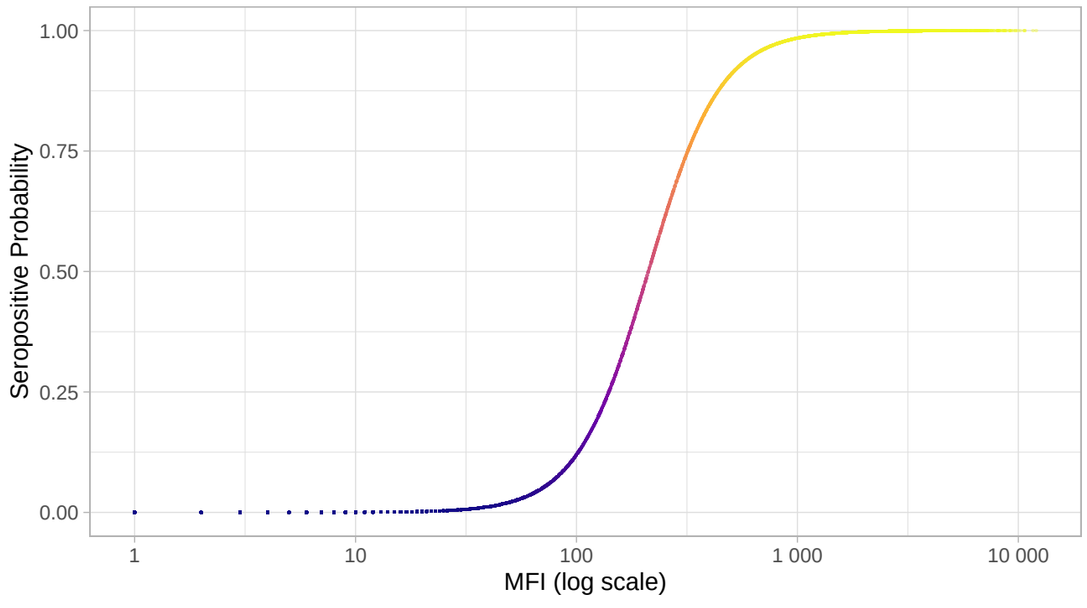
N=9424 | >0.95=1713 | <0.05=5447 | Ambig=2264

## Original MFI Distribution: hp_omp

Hard cutoff threshold = 170

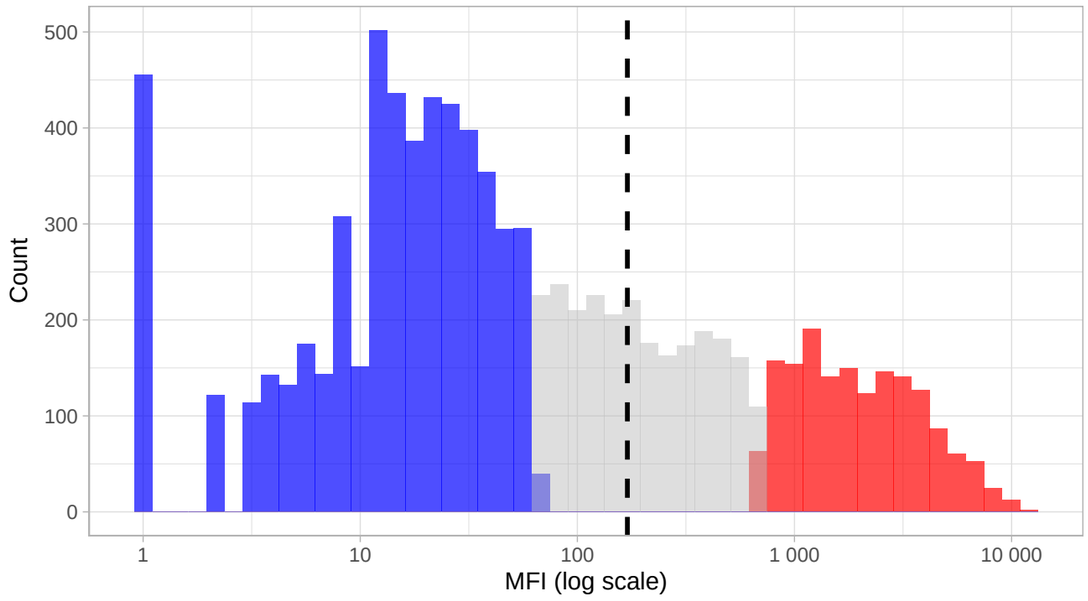



## IgG vs Seropositive Probability: hp_omp



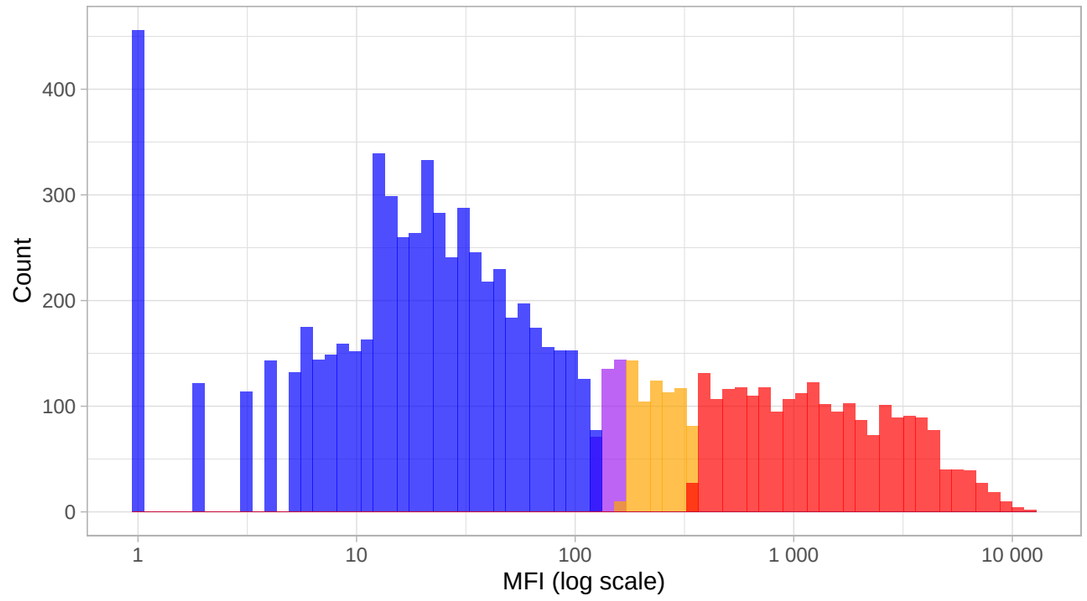

## High−Confidence Seropositive Distribution: hp_omp

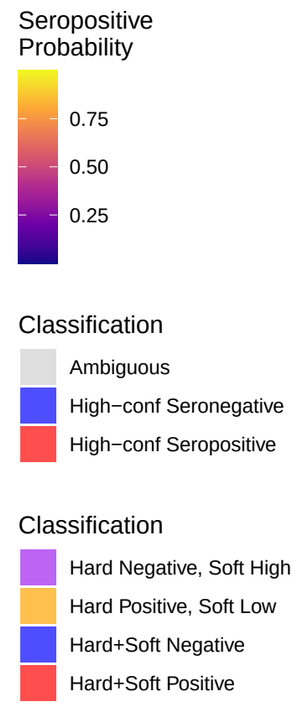
Prob threshold = 0.96




## Phenotype Distribution by Classification: hp_omp

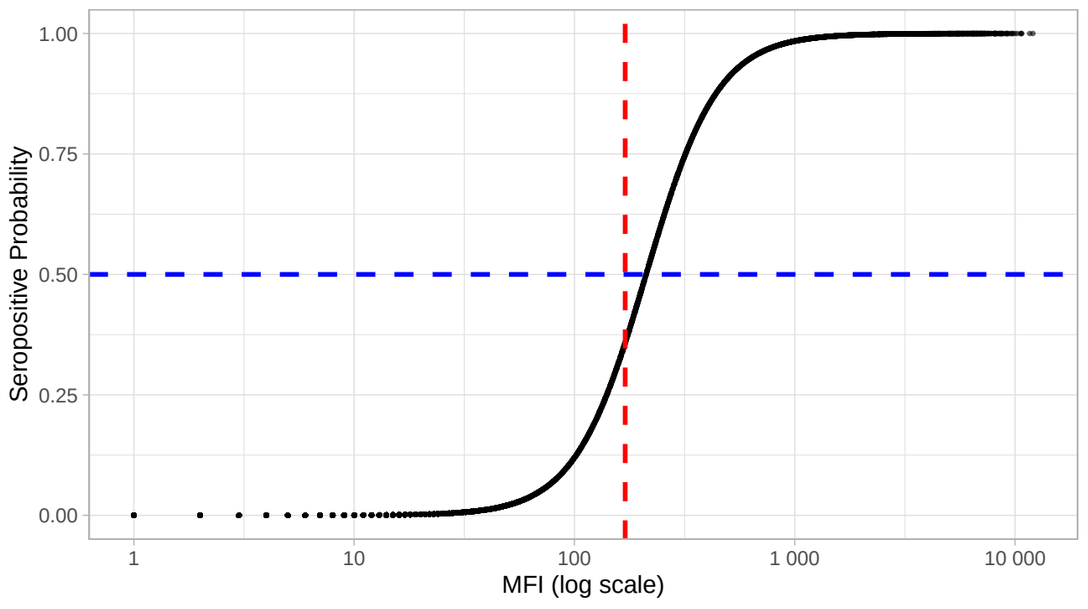
Comparing hard vs soft classifications



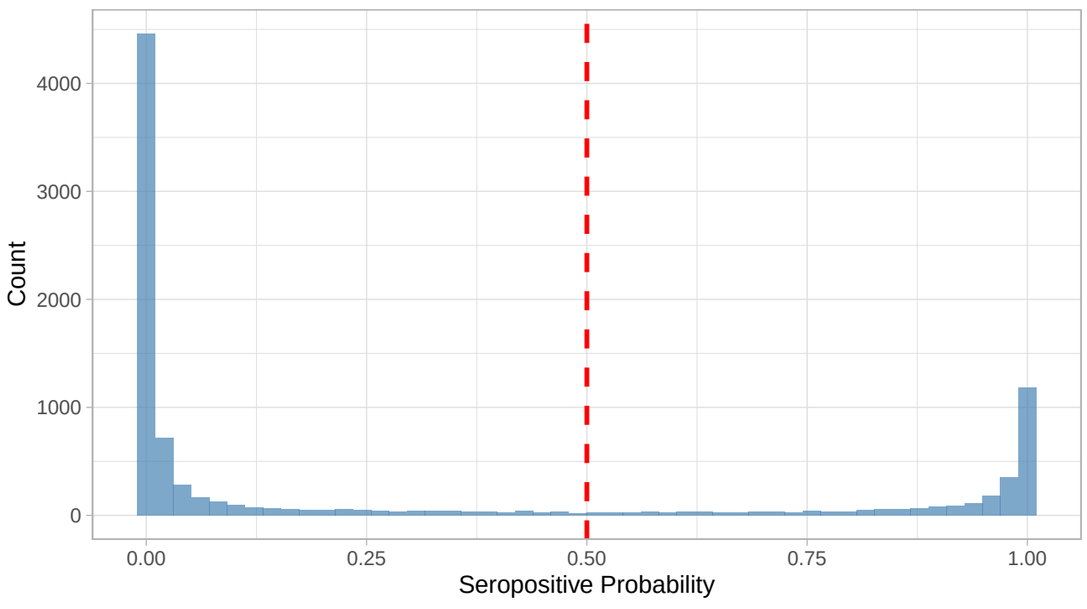

## IgG Level vs Seropositive Probability: hp_omp

Red line = hard threshold, Blue line = 50% probability



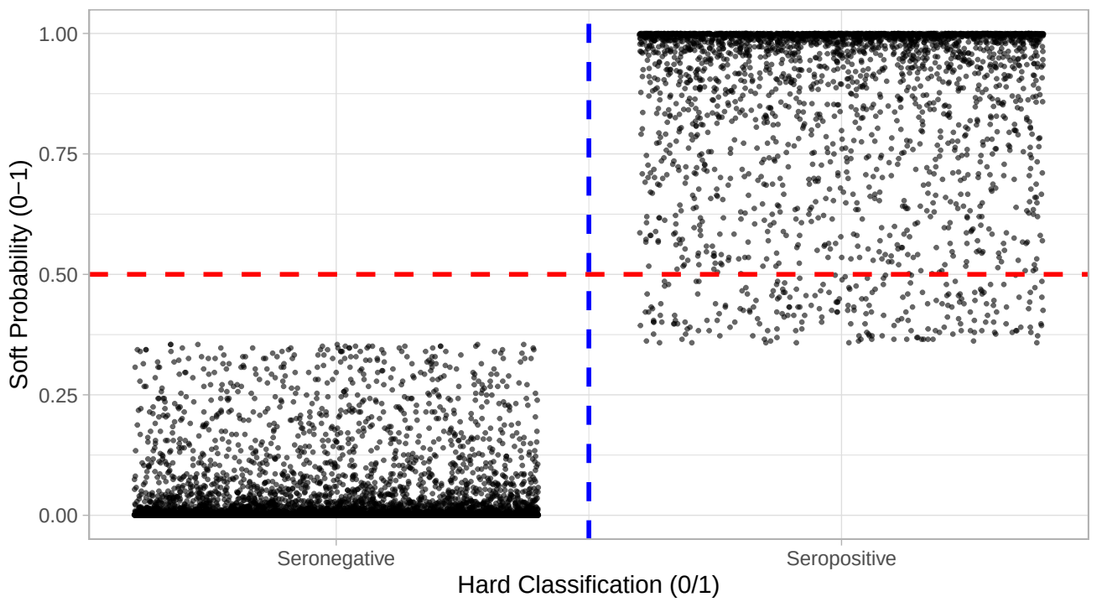

## Distribution of Seropositive Probabilities: hp_omp

Red line = 50% threshold



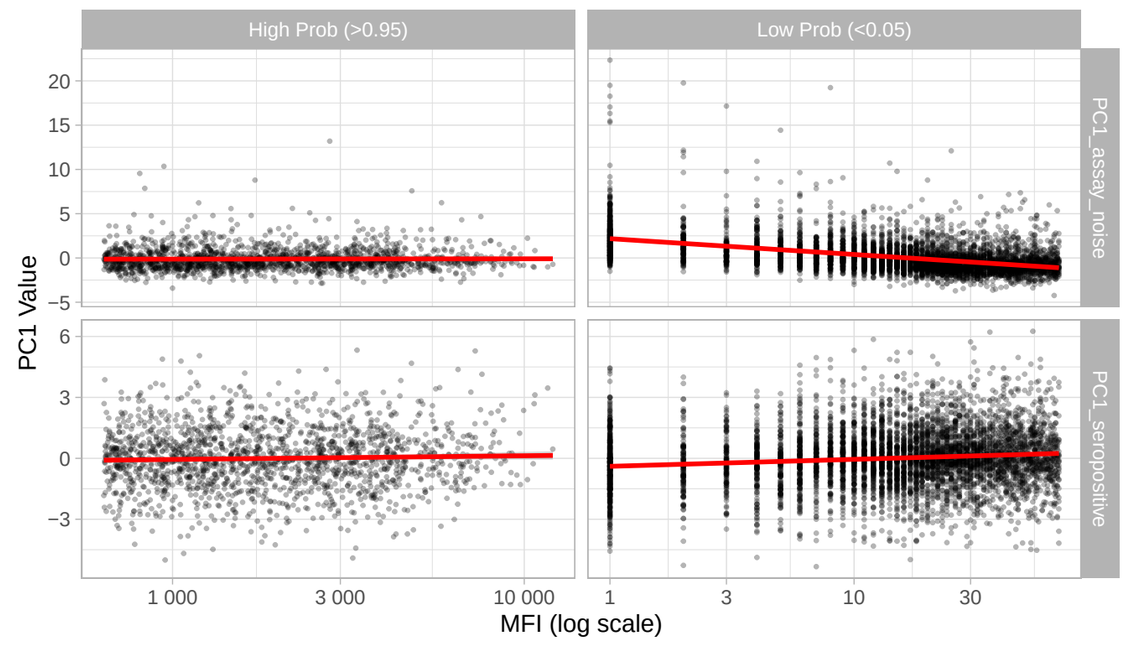

## Hard vs Soft Classification: hp_omp

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: hp_omp

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

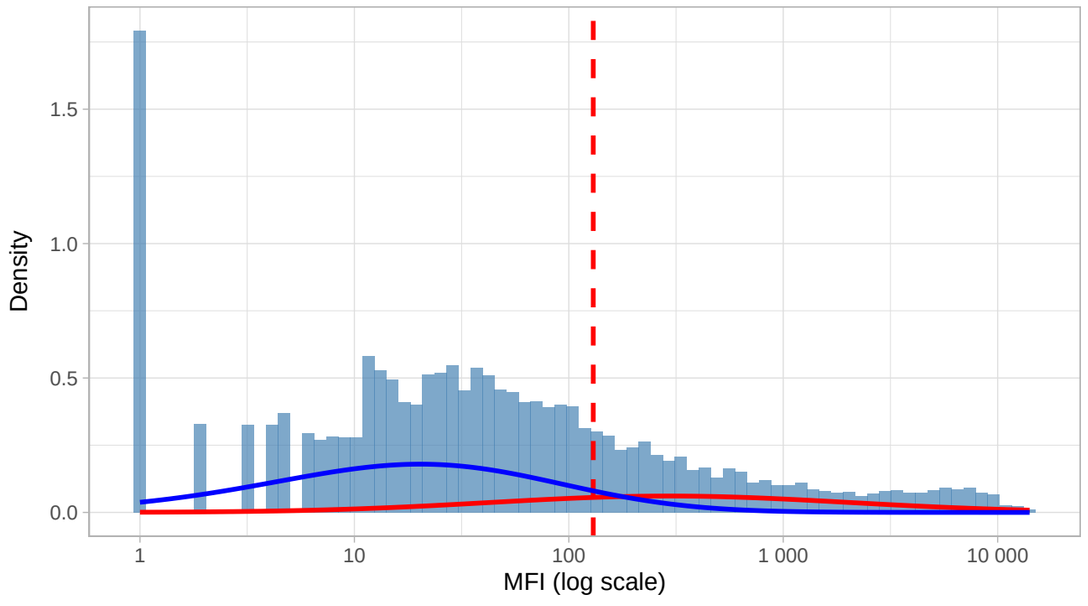


# Diagnostics: hp_urea

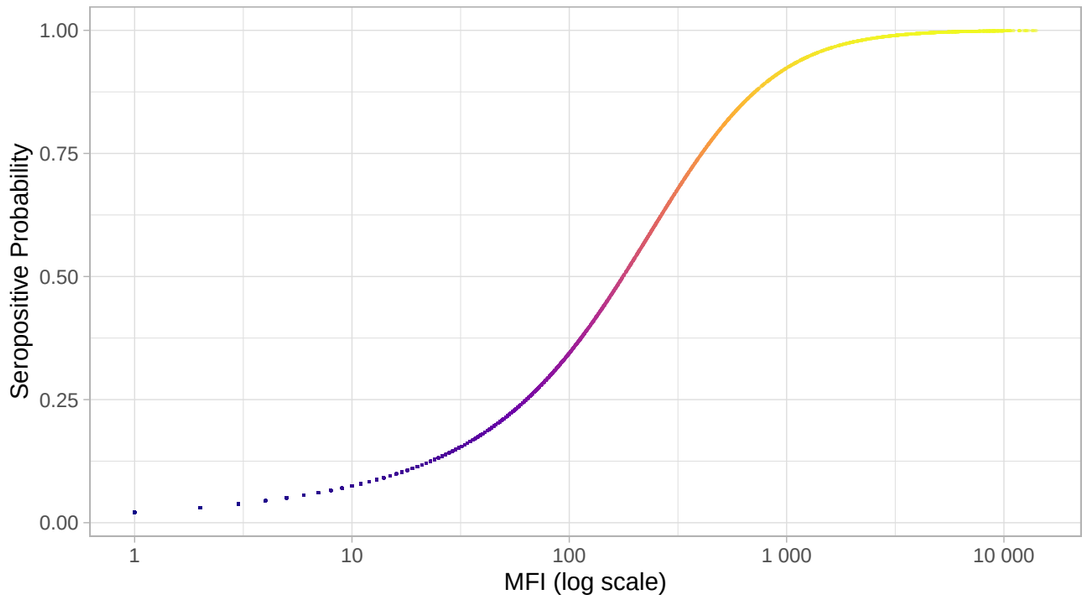
N=9424 | >0.95=689 | <0.05=1466 | Ambig=7269

## Original MFI Distribution: hp_urea

Hard cutoff threshold = 130

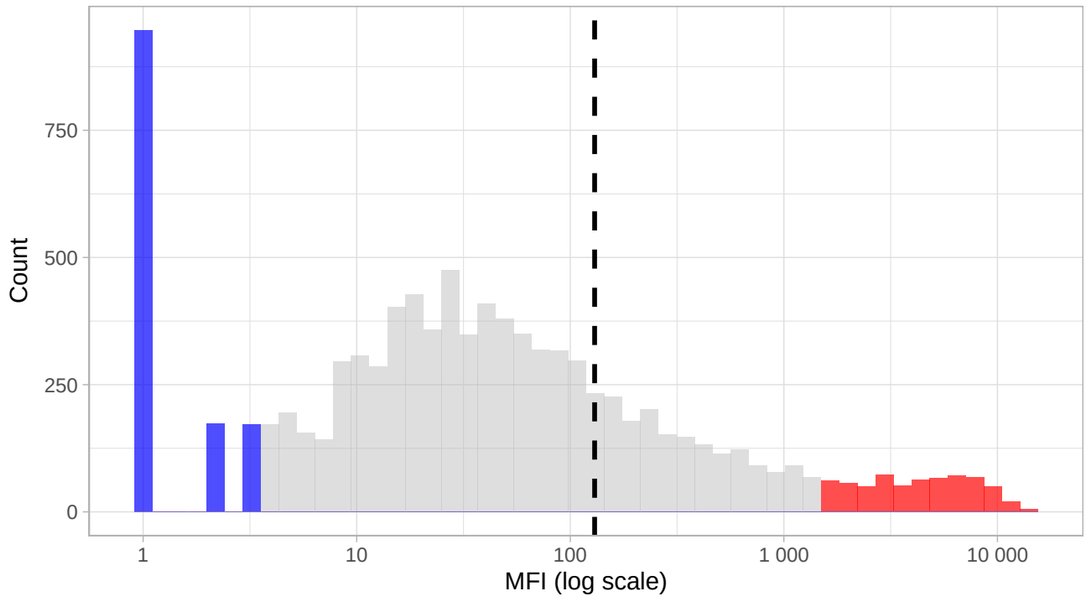



## IgG vs Seropositive Probability: hp_urea



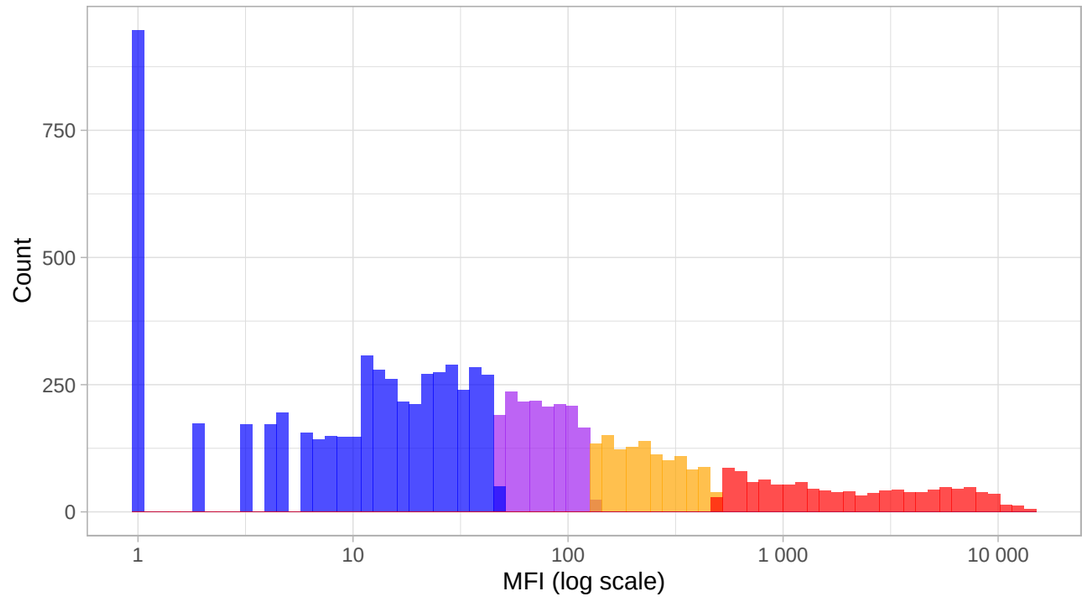

## High−Confidence Seropositive Distribution: hp_urea

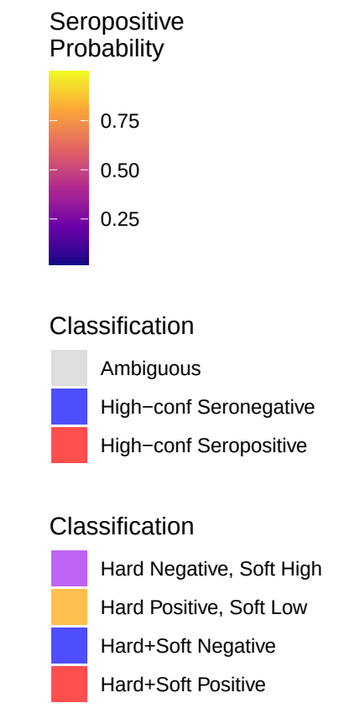
Prob threshold = 0.96




## Phenotype Distribution by Classification: hp_urea

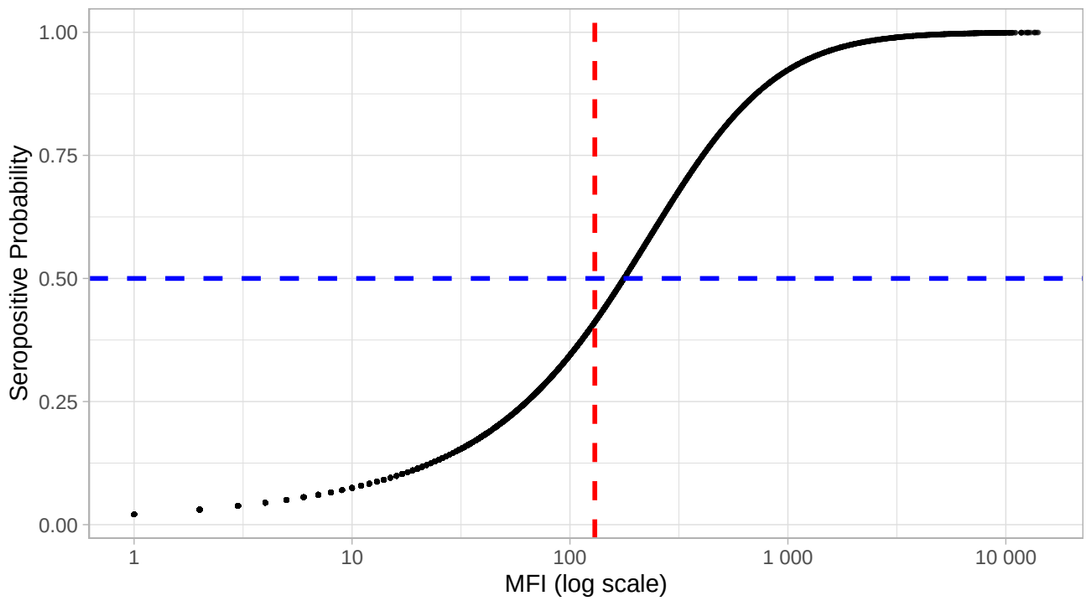
Comparing hard vs soft classifications



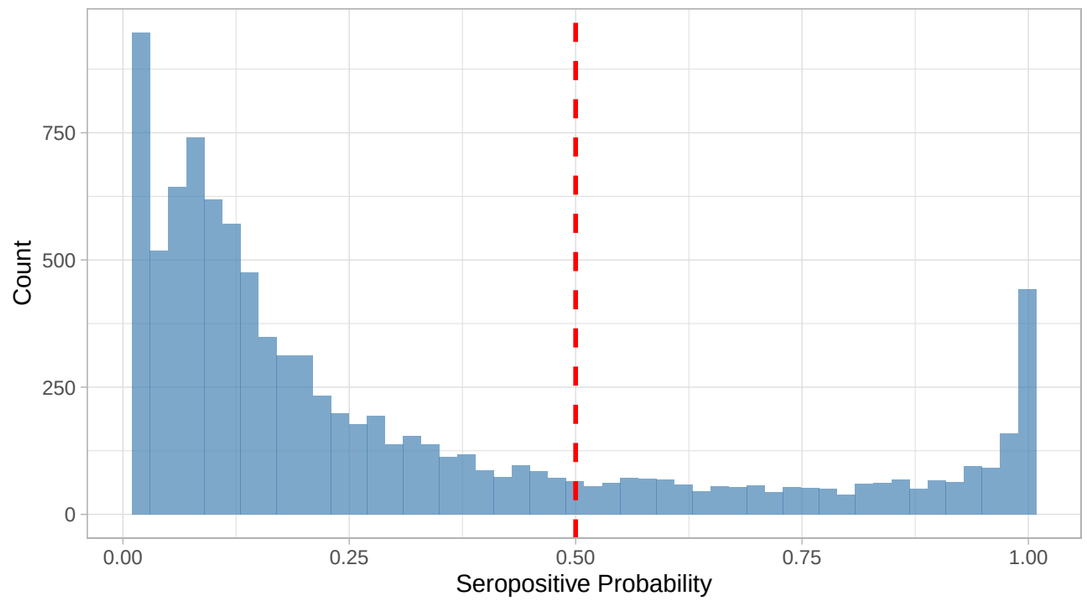

## IgG Level vs Seropositive Probability: hp_urea

Red line = hard threshold, Blue line = 50% probability




## Distribution of Seropositive Probabilities: hp_urea

Red line = 50% threshold




## Hard vs Soft Classification: hp_urea

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: hp_urea

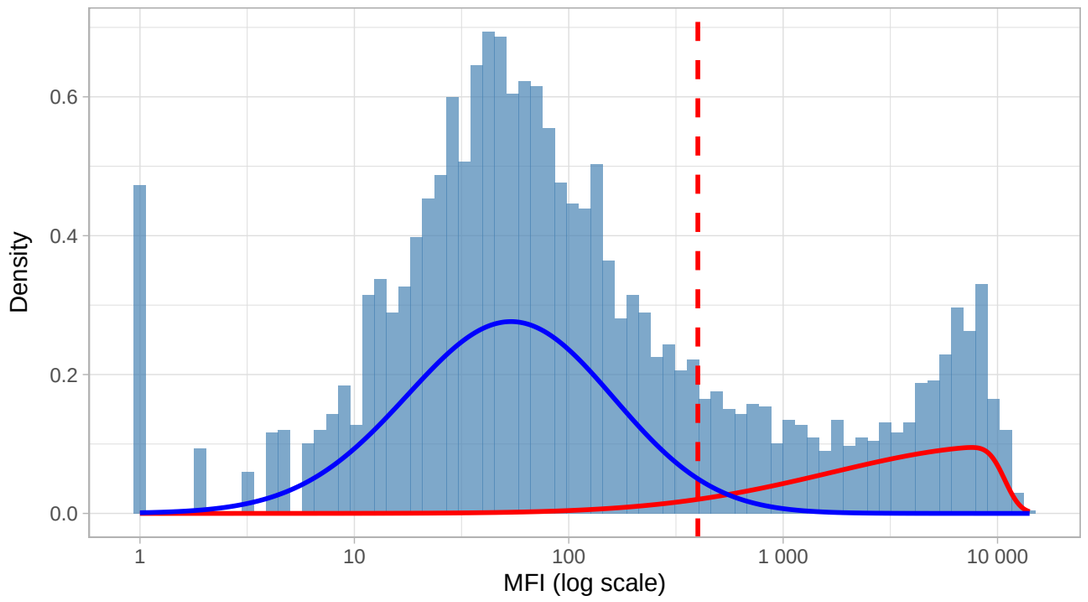
Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

# Diagnostics: hp_caga

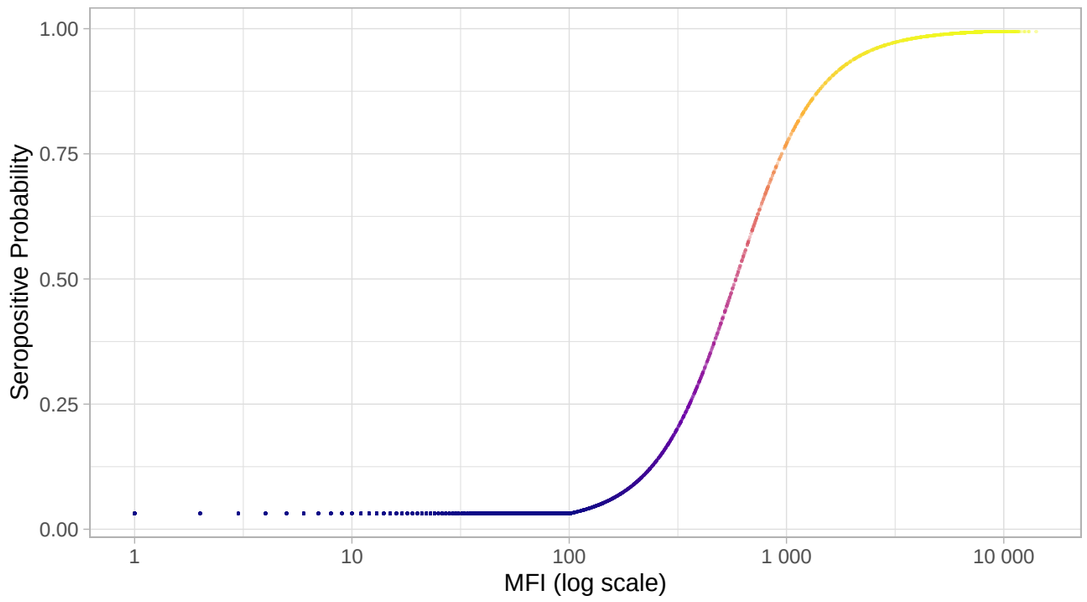
N=4754 | >0.95=632 | <0.05=3038 | Ambig=1084

## Original MFI Distribution: hp_caga

Hard cutoff threshold = 400

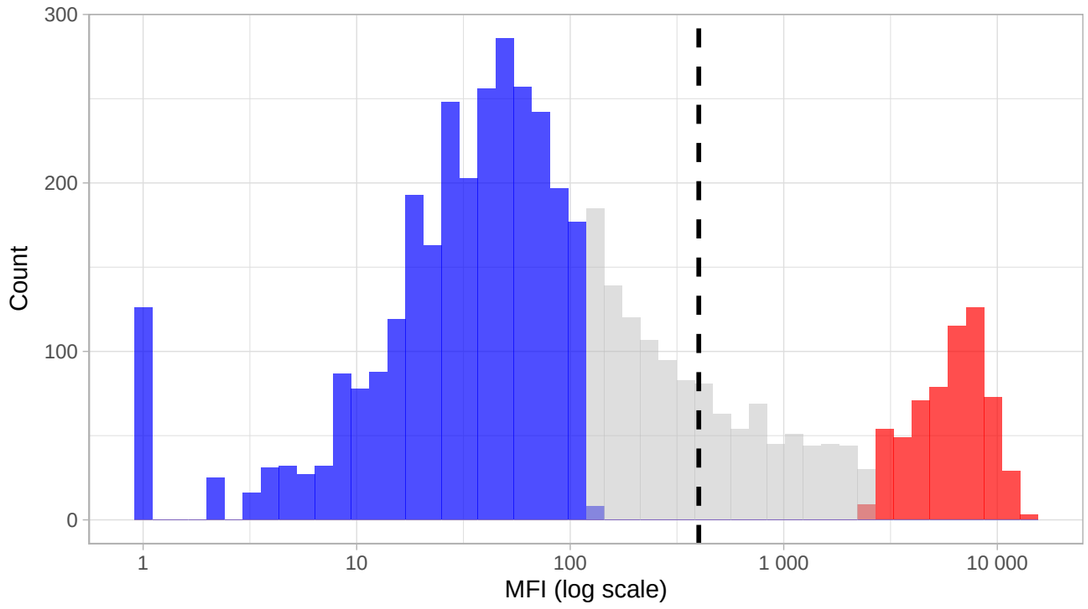



## IgG vs Seropositive Probability: hp_caga



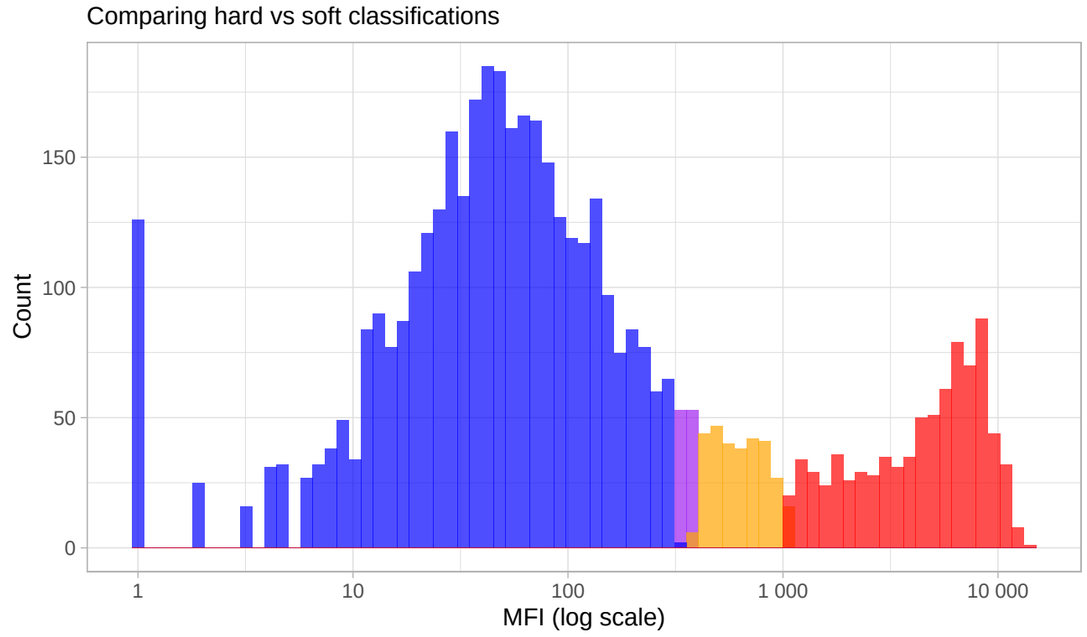

## High−Confidence Seropositive Distribution: hp_caga

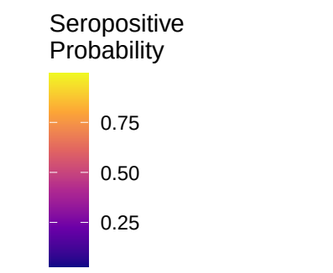
Prob threshold = 0.96

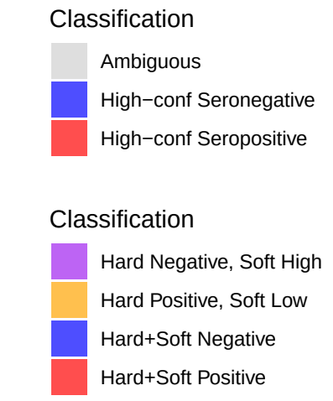



## Phenotype Distribution by Classification: hp_caga

Comparing hard vs soft classifications



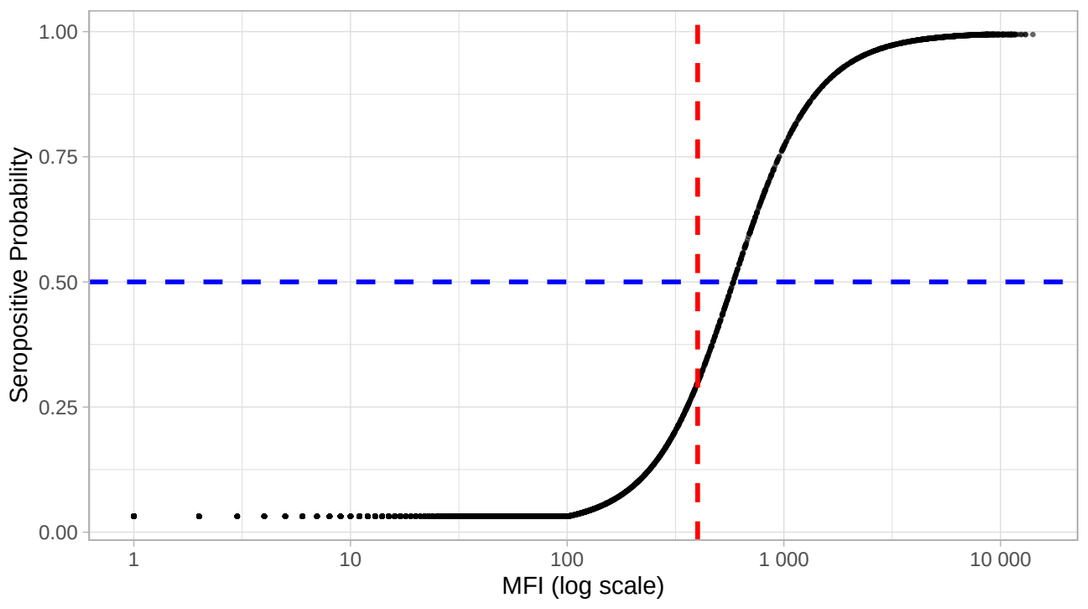







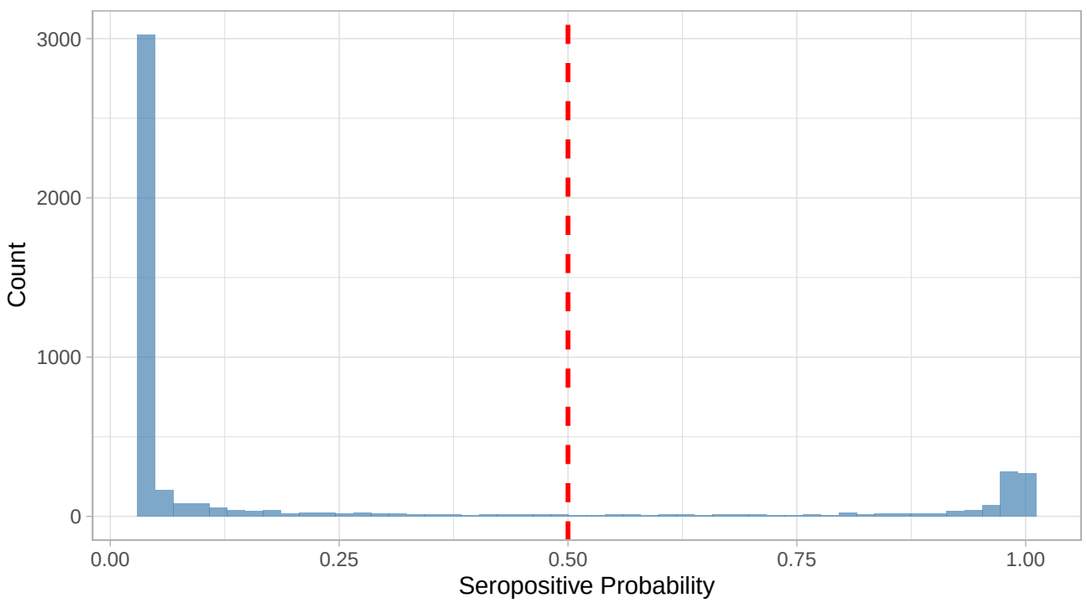
## IgG Level vs Seropositive Probability: hp_caga

Red line = hard threshold, Blue line = 50% probability



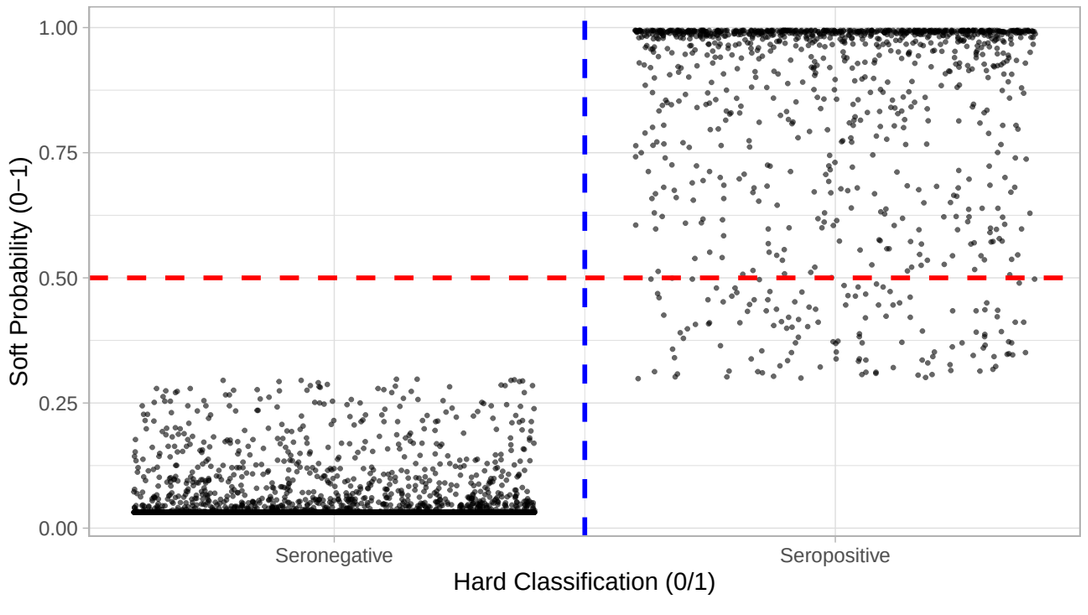

## Distribution of Seropositive Probabilities: hp_caga

Red line = 50% threshold



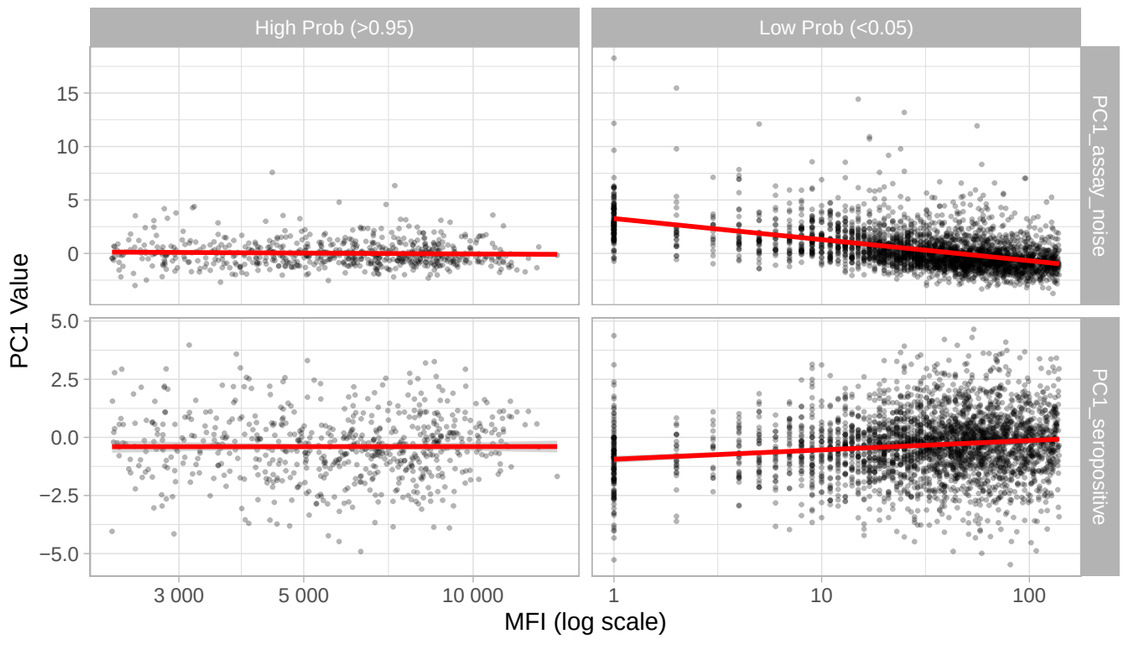

## Hard vs Soft Classification: hp_caga

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: hp_caga

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

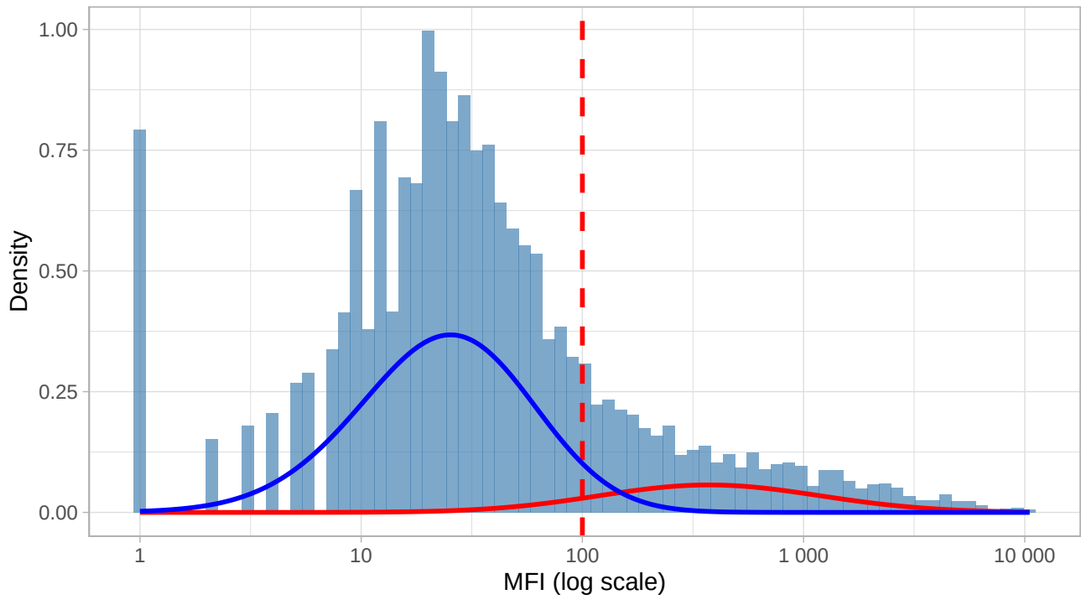


# Diagnostics: hp_vaca

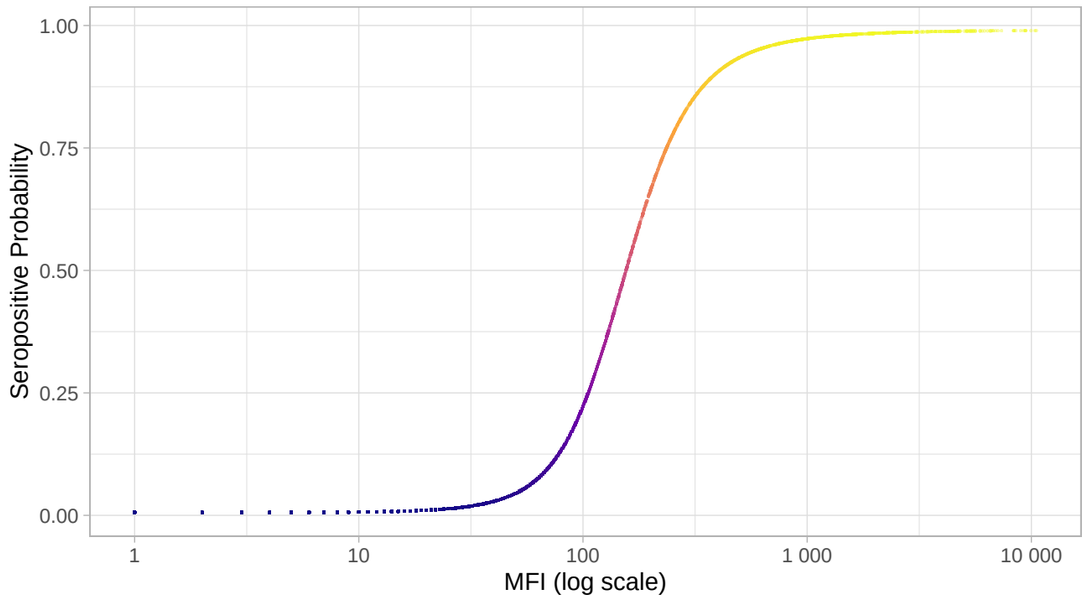
N=9424 | >0.95=601 | <0.05=6501 | Ambig=2322

## Original MFI Distribution: hp_vaca

Hard cutoff threshold = 100

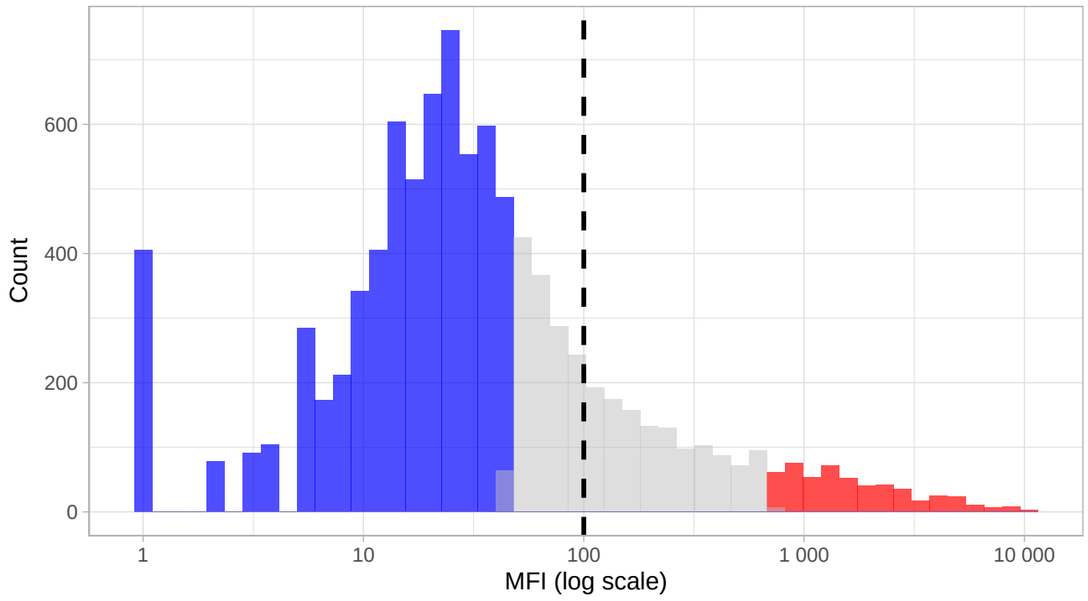



## IgG vs Seropositive Probability: hp_vaca



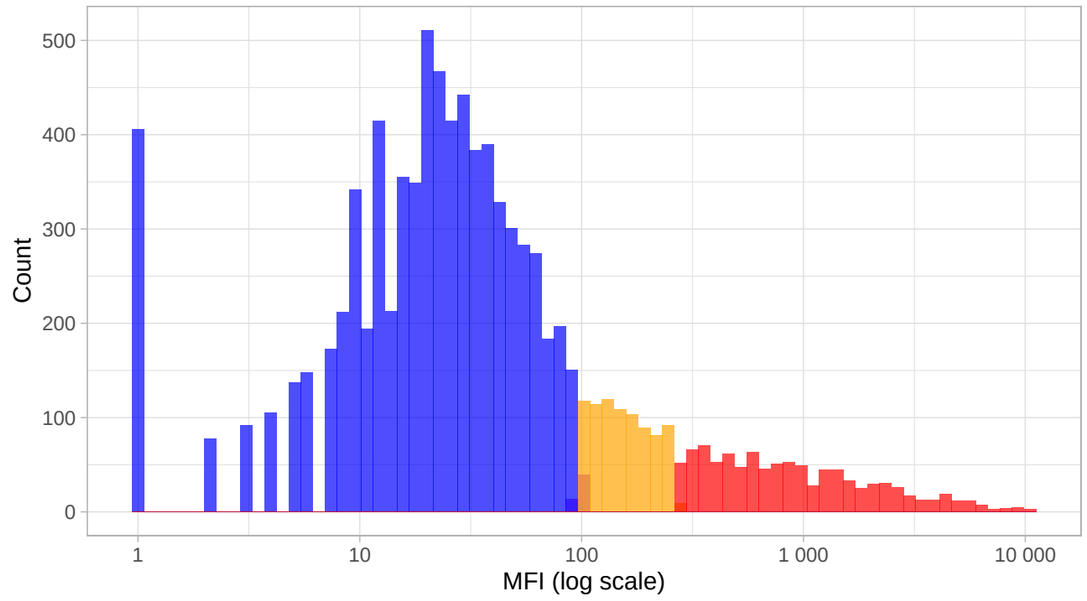

## High−Confidence Seropositive Distribution: hp_vaca

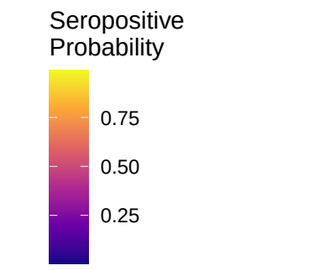
Prob threshold = 0.96




## Phenotype Distribution by Classification: hp_vaca

Comparing hard vs soft classifications



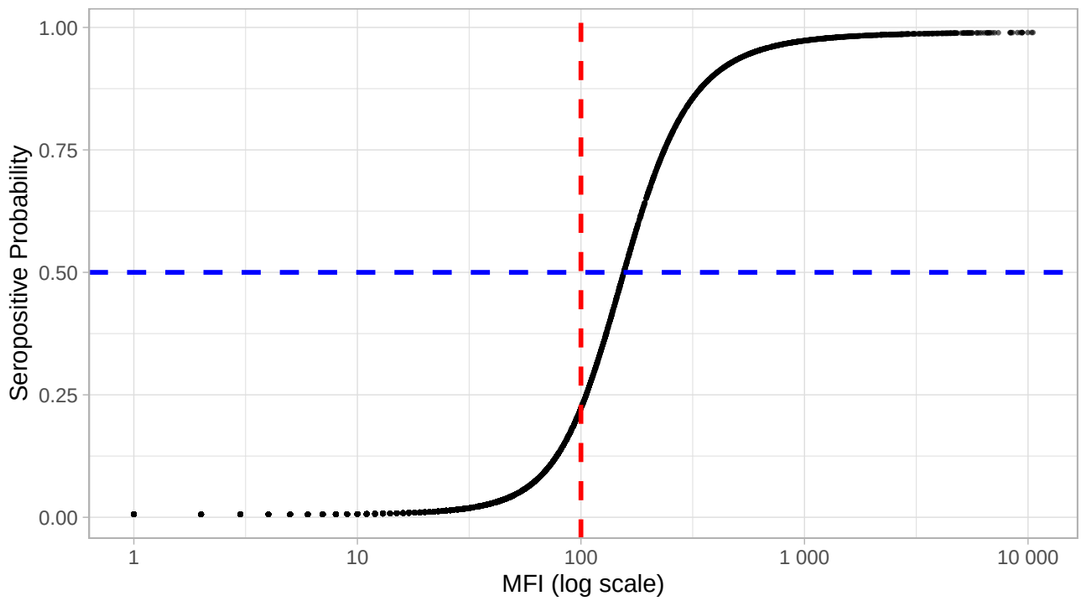







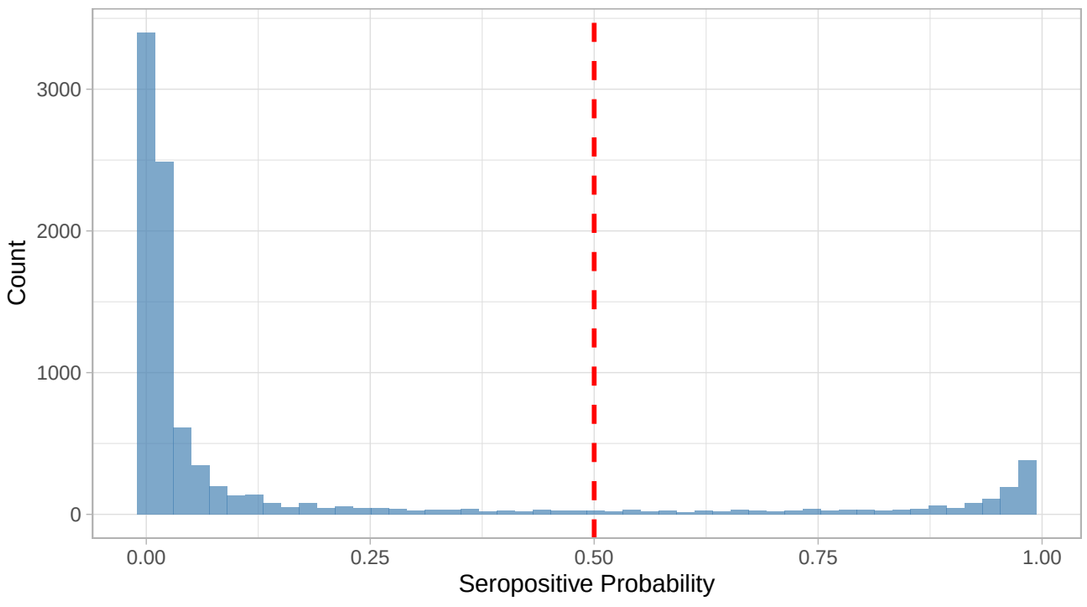

## IgG Level vs Seropositive Probability: hp_vaca

Red line = hard threshold, Blue line = 50% probability



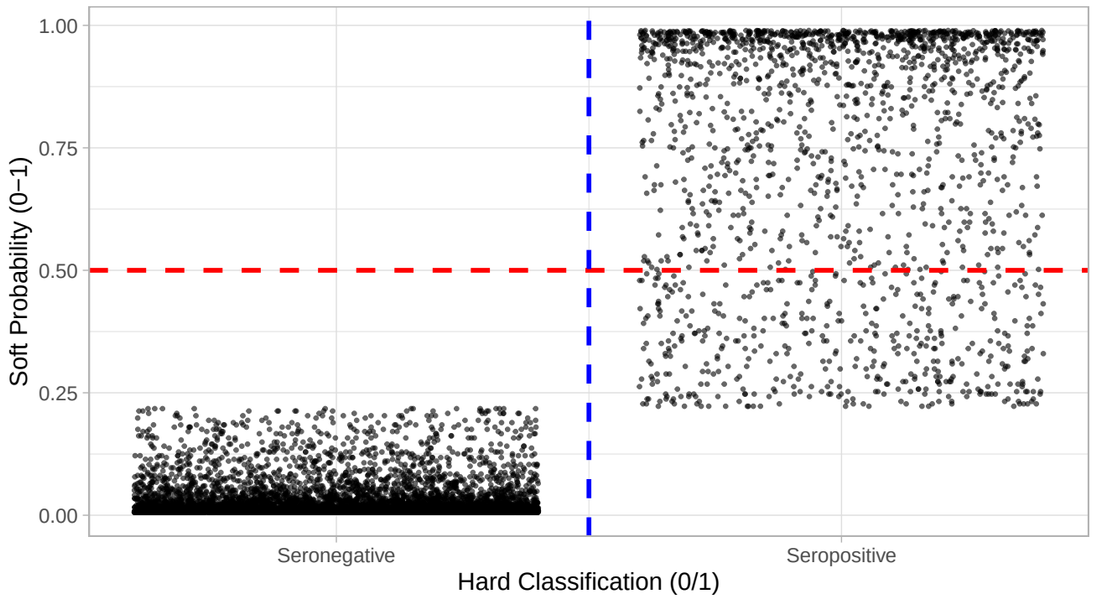

## Distribution of Seropositive Probabilities: hp_vaca

Red line = 50% threshold



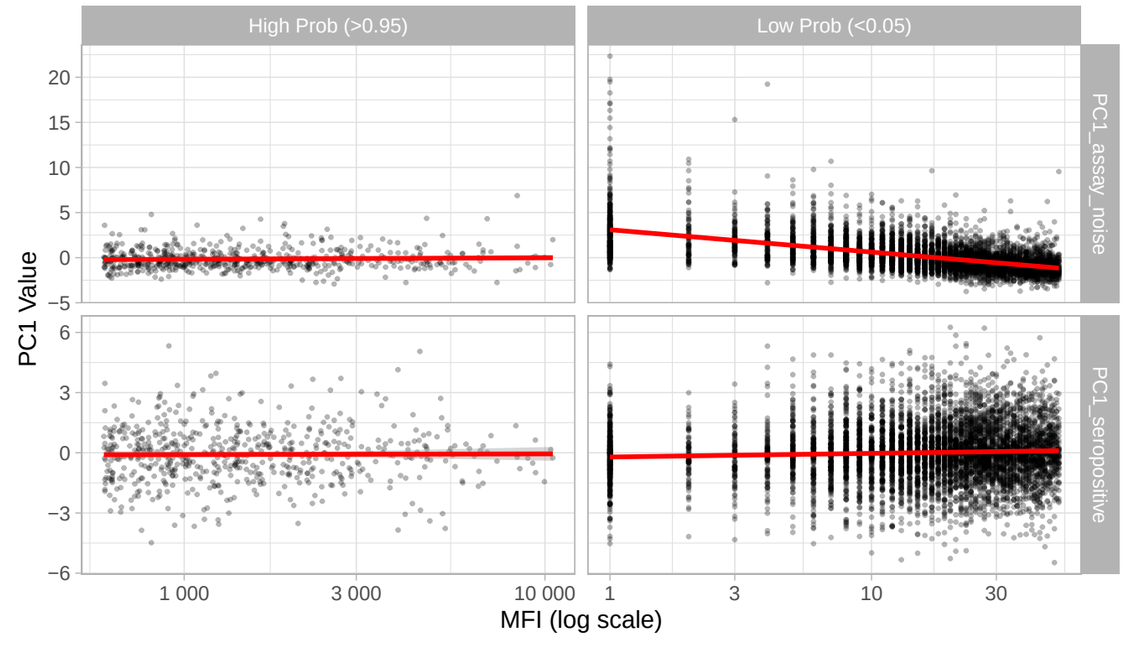

## Hard vs Soft Classification: hp_vaca

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: hp_vaca

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

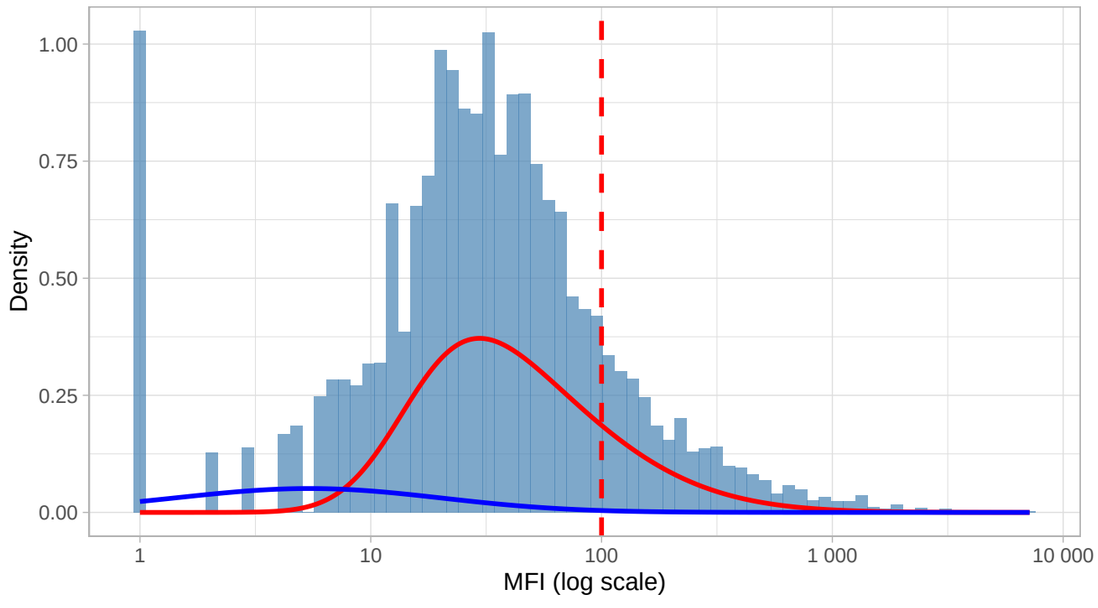


# Diagnostics: toxo_p22

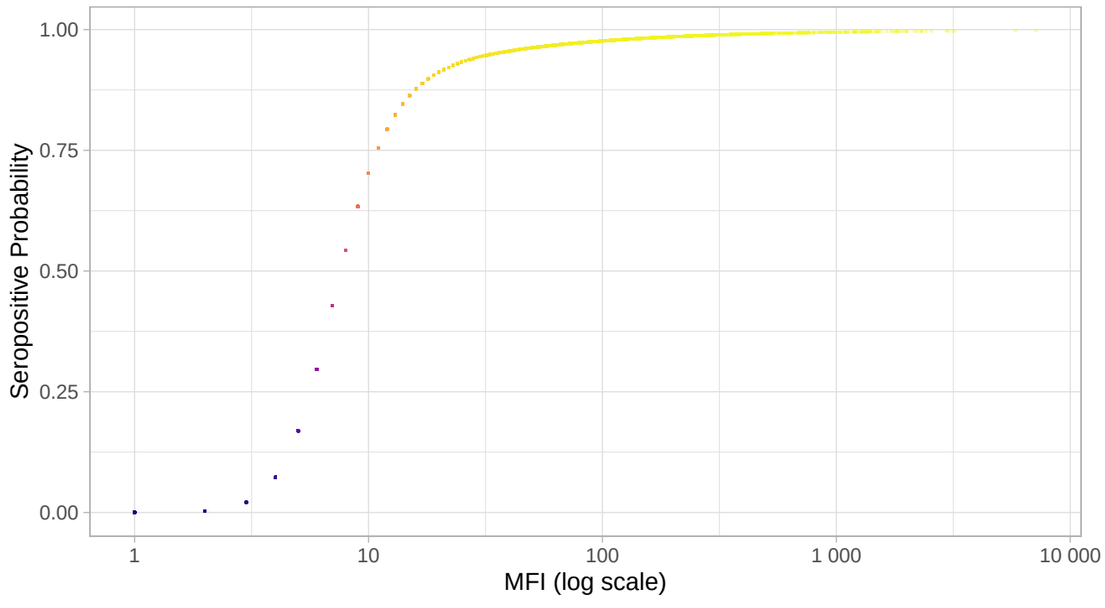
N=9424 | >0.95=4289 | <0.05=636 | Ambig=4499

## Original MFI Distribution: toxo_p22

Hard cutoff threshold = 100

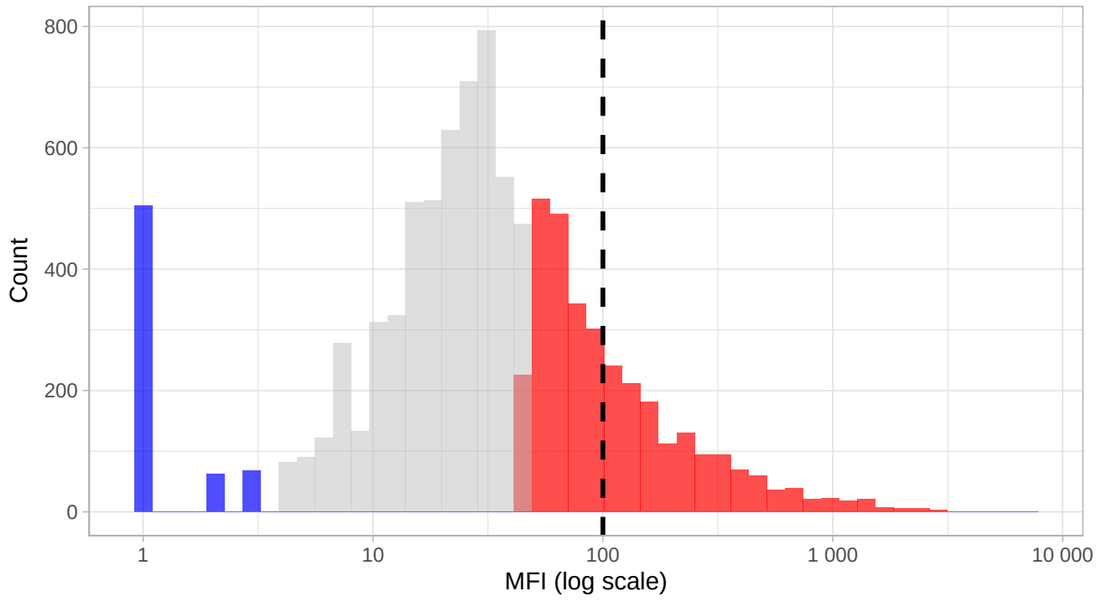



## IgG vs Seropositive Probability: toxo_p22



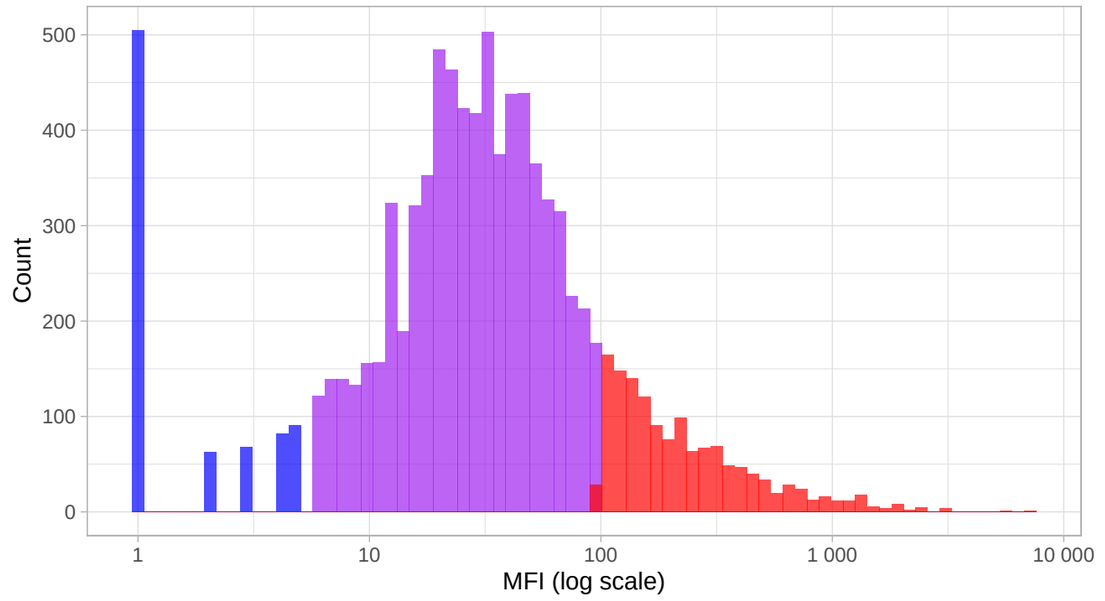

## High−Confidence Seropositive Distribution: toxo_p22

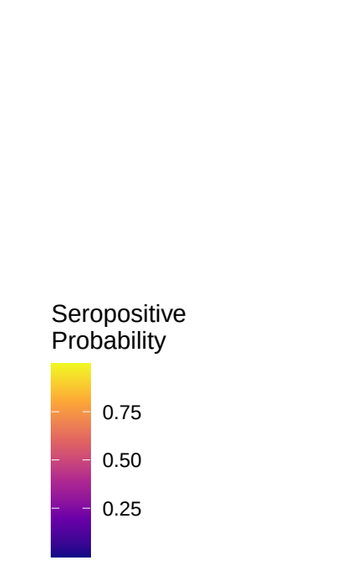
Prob threshold = 0.96




## Phenotype Distribution by Classification: toxo_p22

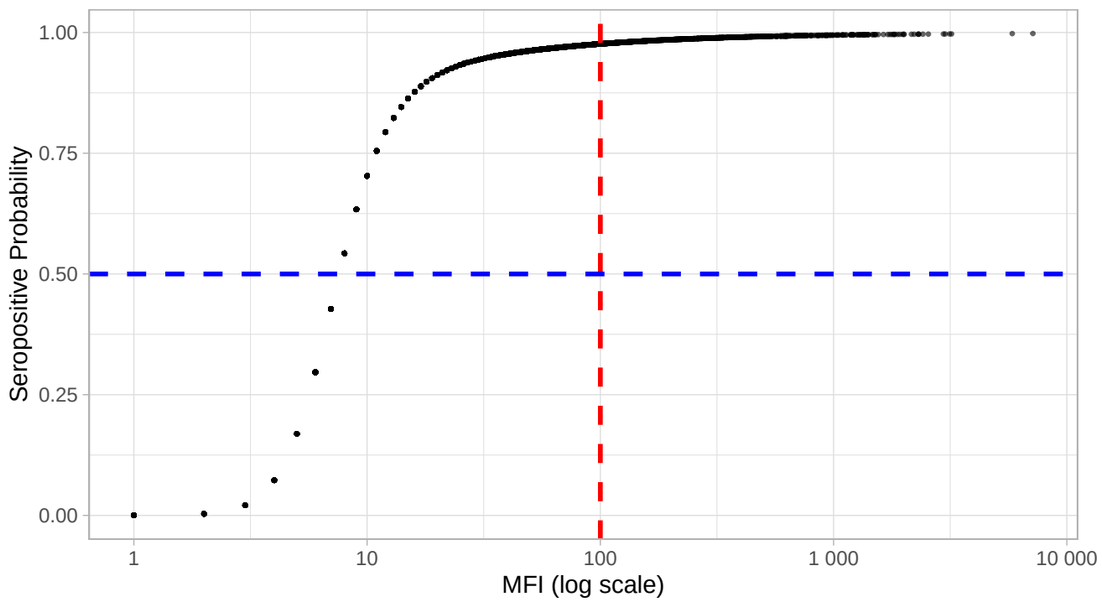
Comparing hard vs soft classifications



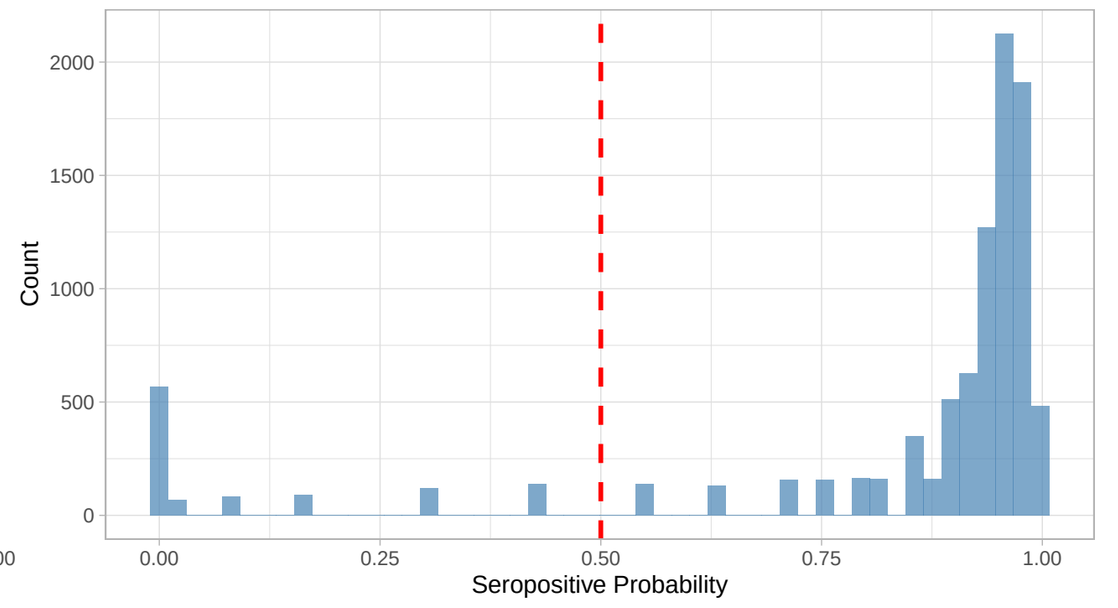

## IgG Level vs Seropositive Probability: toxo_p22

Red line = hard threshold, Blue line = 50% probability



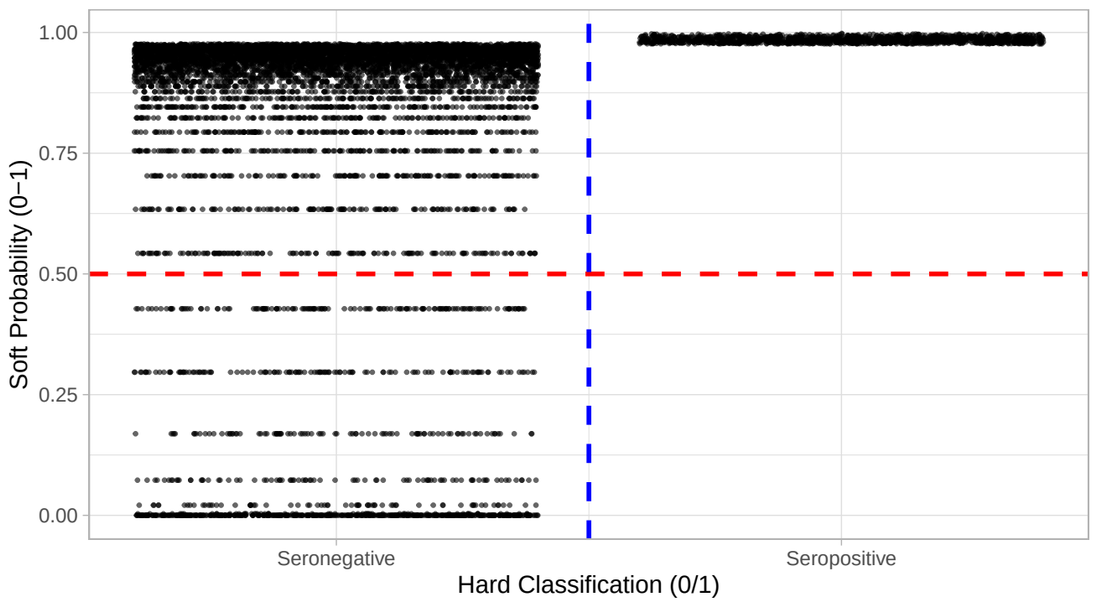

## Distribution of Seropositive Probabilities: toxo_p22

Red line = 50% threshold



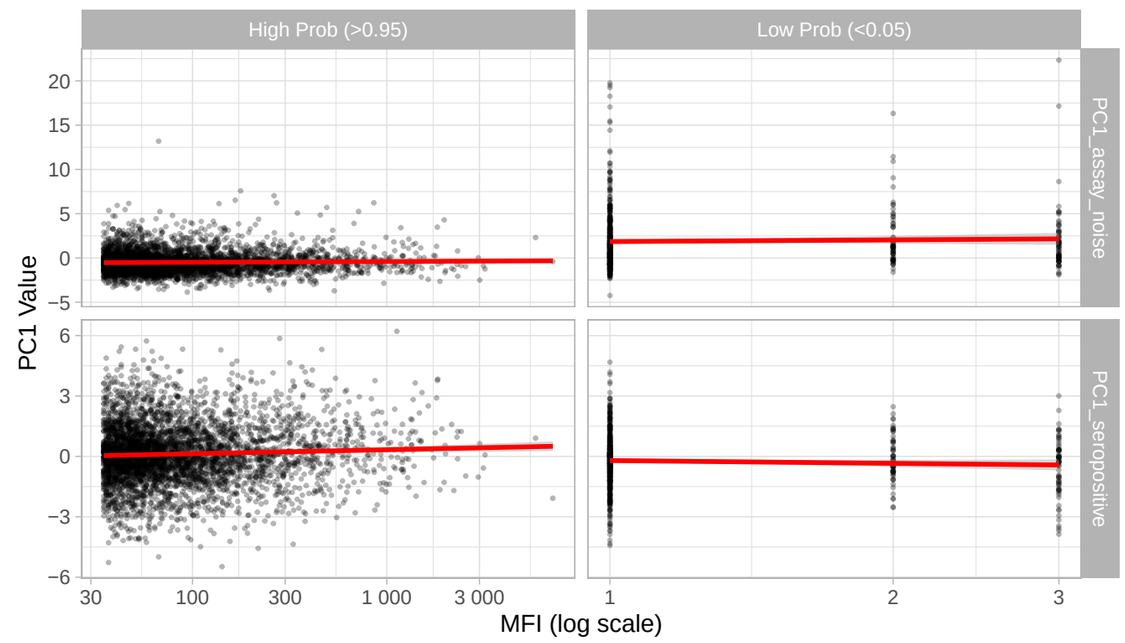

## Hard vs Soft Classification: toxo_p22

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: toxo_p22

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

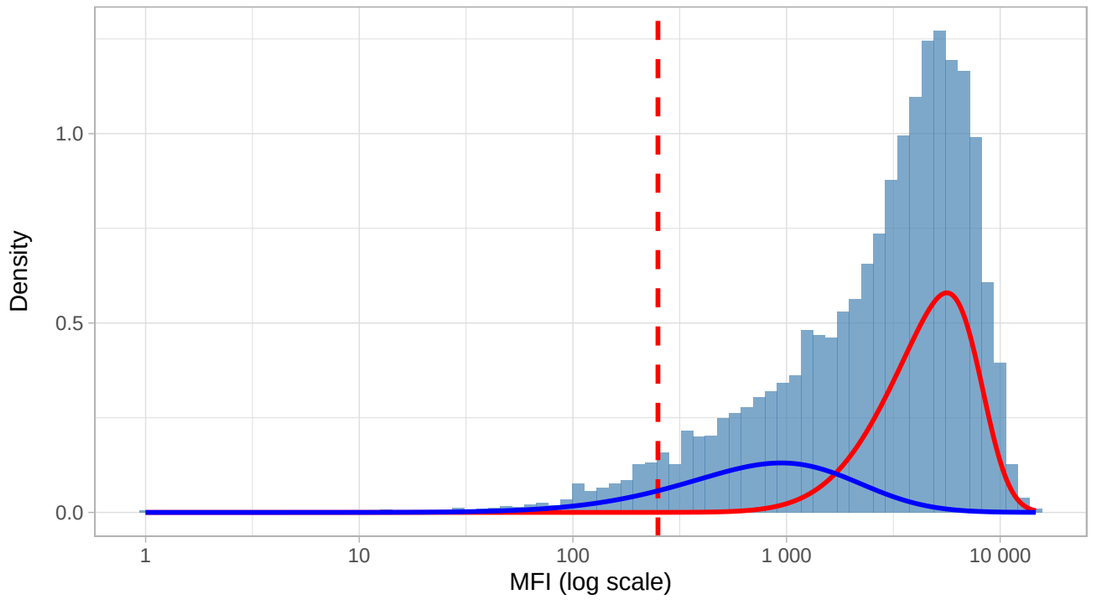


# Diagnostics: bkv_vp1

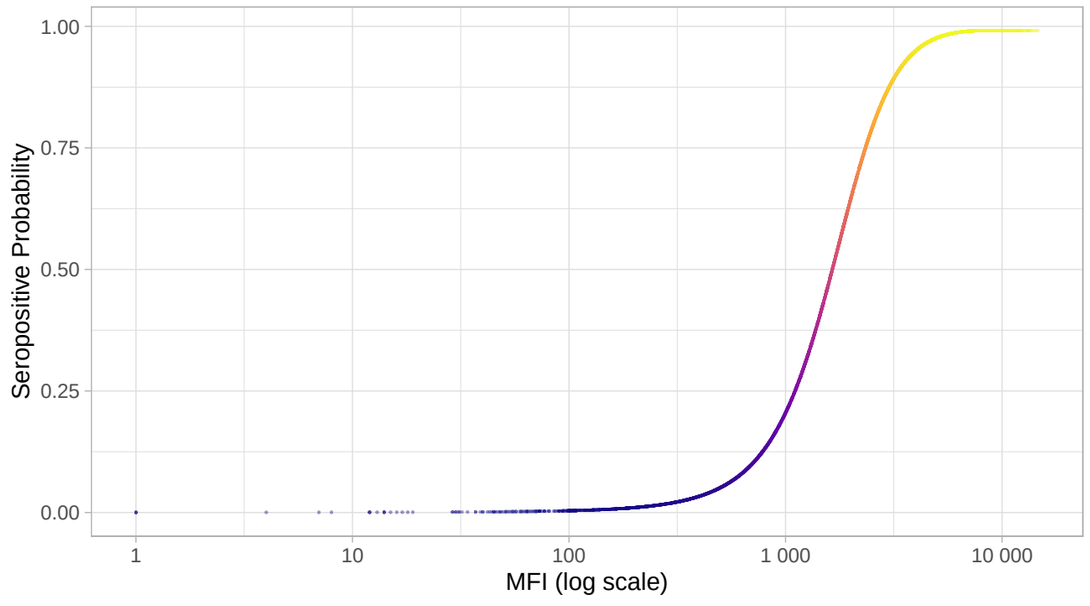
N=9424 | >0.95=4087 | <0.05=953 | Ambig=4384

## Original MFI Distribution: bkv_vp1

Hard cutoff threshold = 250

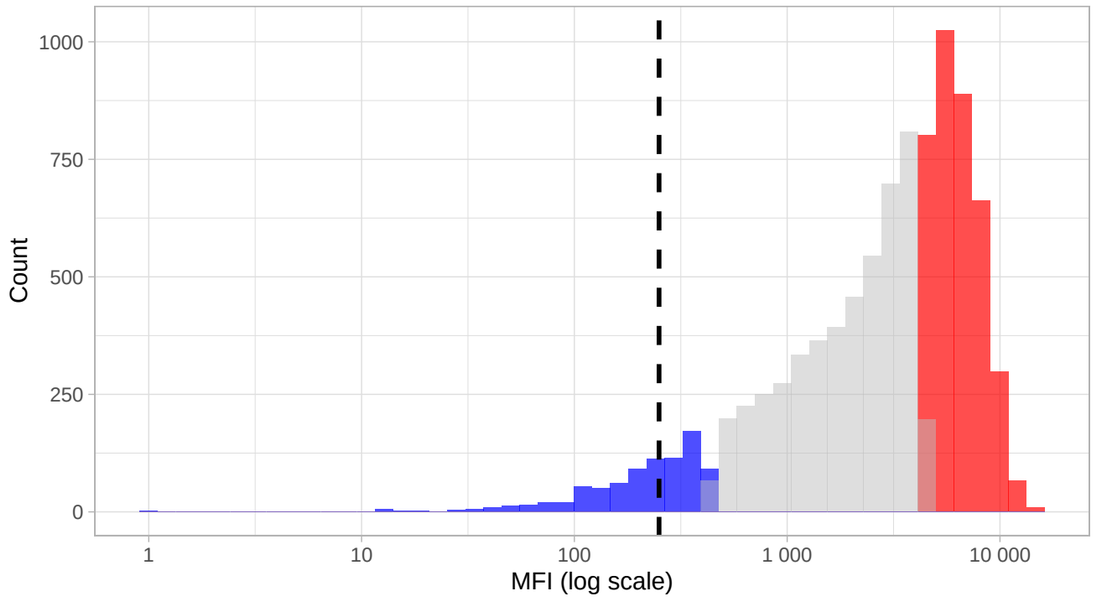



## IgG vs Seropositive Probability: bkv_vp1



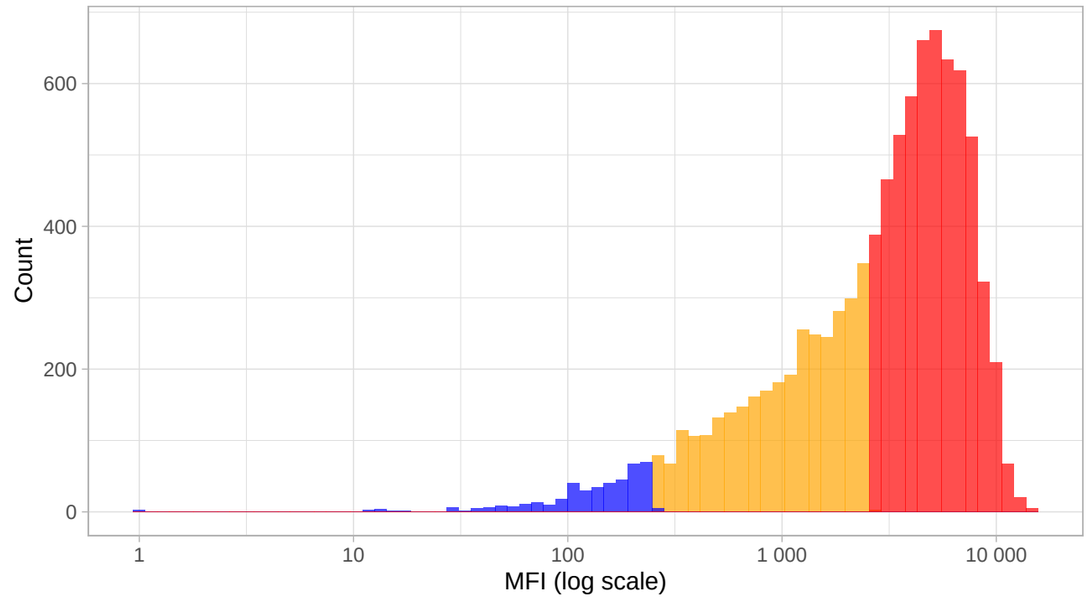

## High−Confidence Seropositive Distribution: bkv_vp1

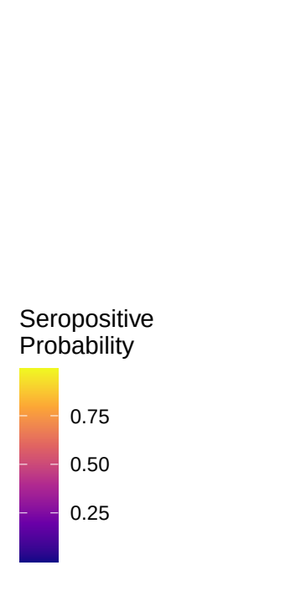
Prob threshold = 0.96




## Phenotype Distribution by Classification: bkv_vp1

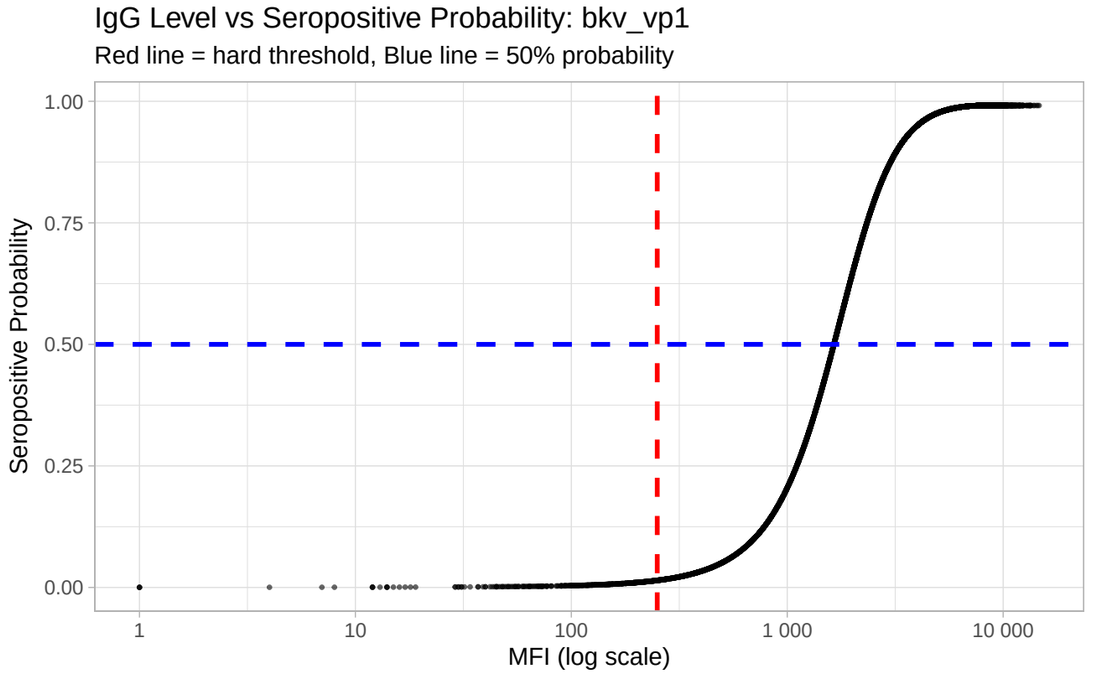
Comparing hard vs soft classifications



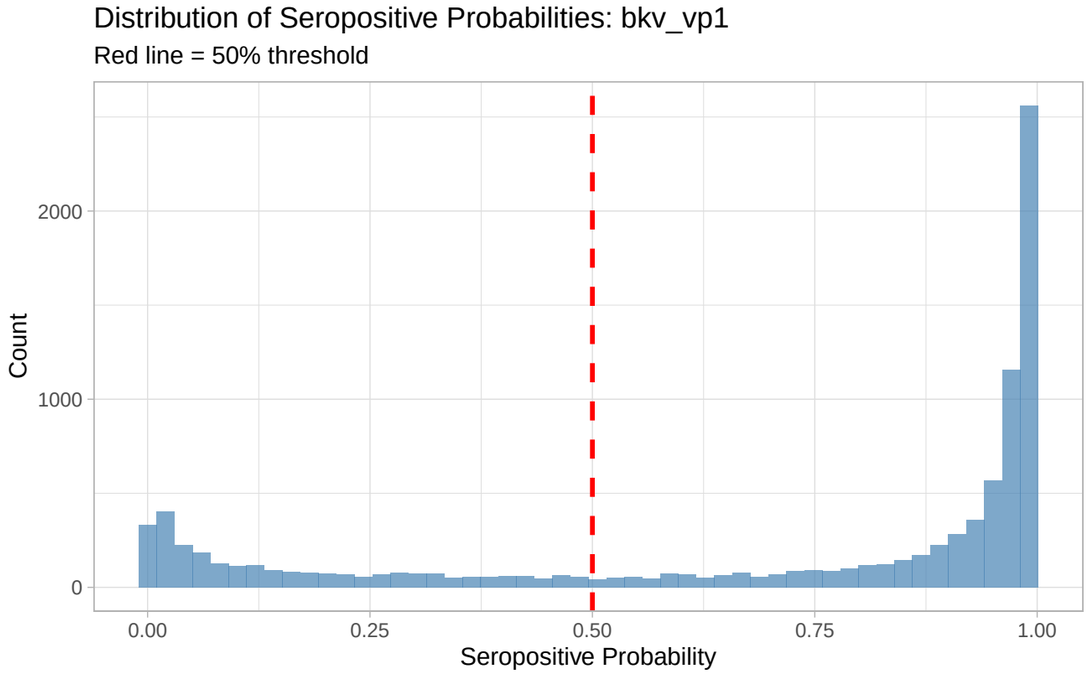

## IgG Level vs Seropositive Probability: bkv_vp1

Red line = hard threshold, Blue line = 50% probability



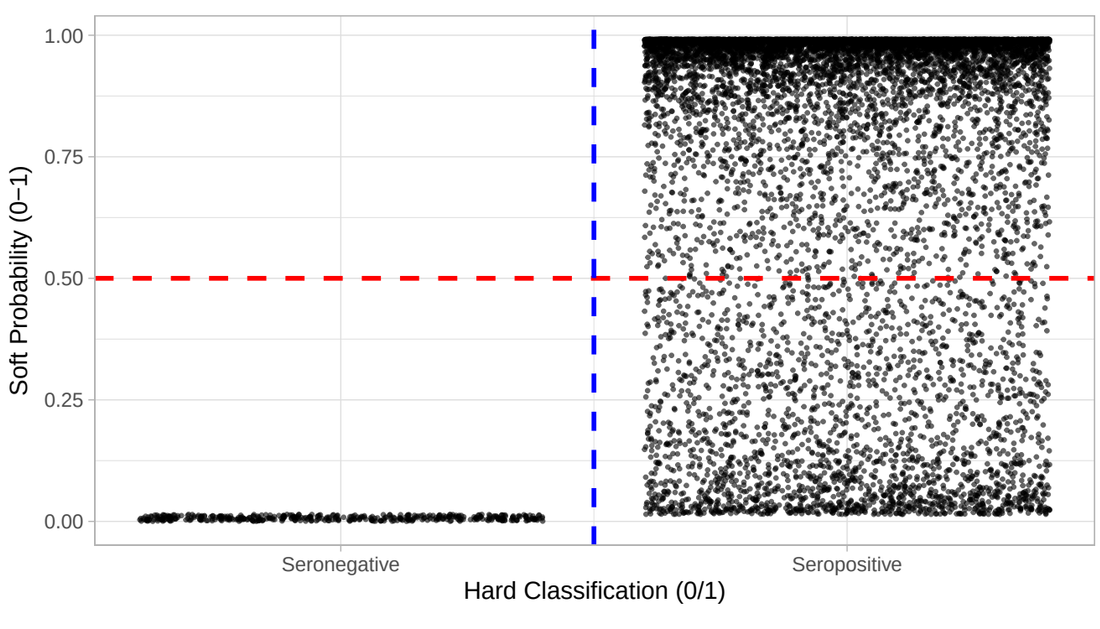

## Distribution of Seropositive Probabilities: bkv_vp1

Red line = 50% threshold



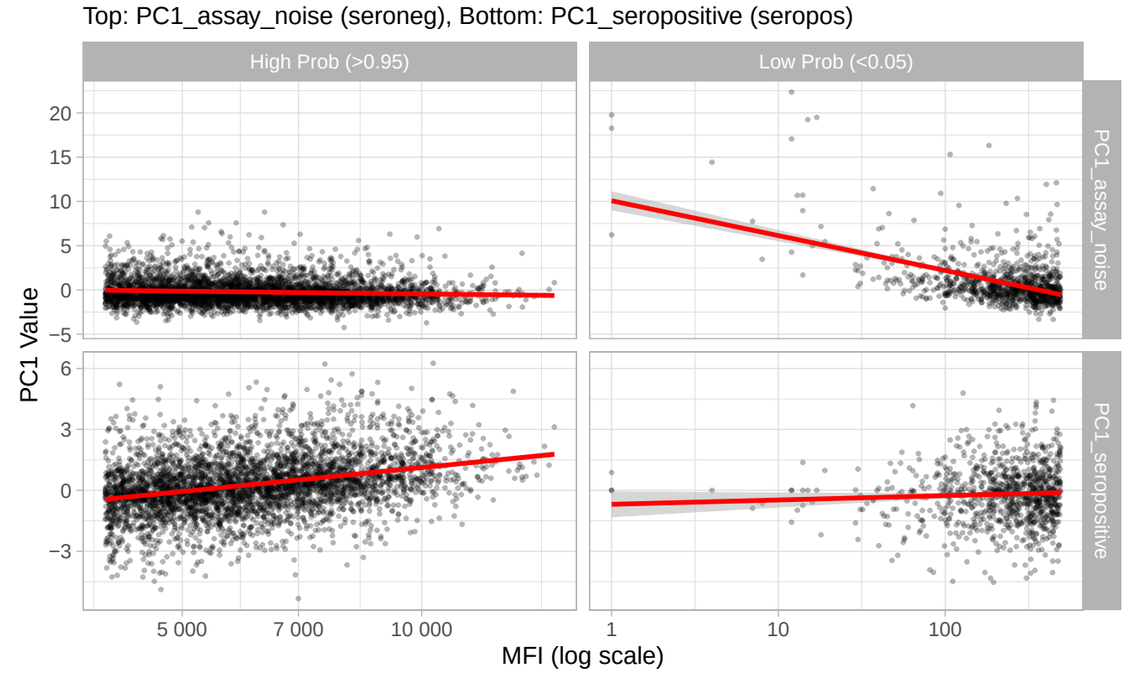

## Hard vs Soft Classification: bkv_vp1

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: bkv_vp1

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

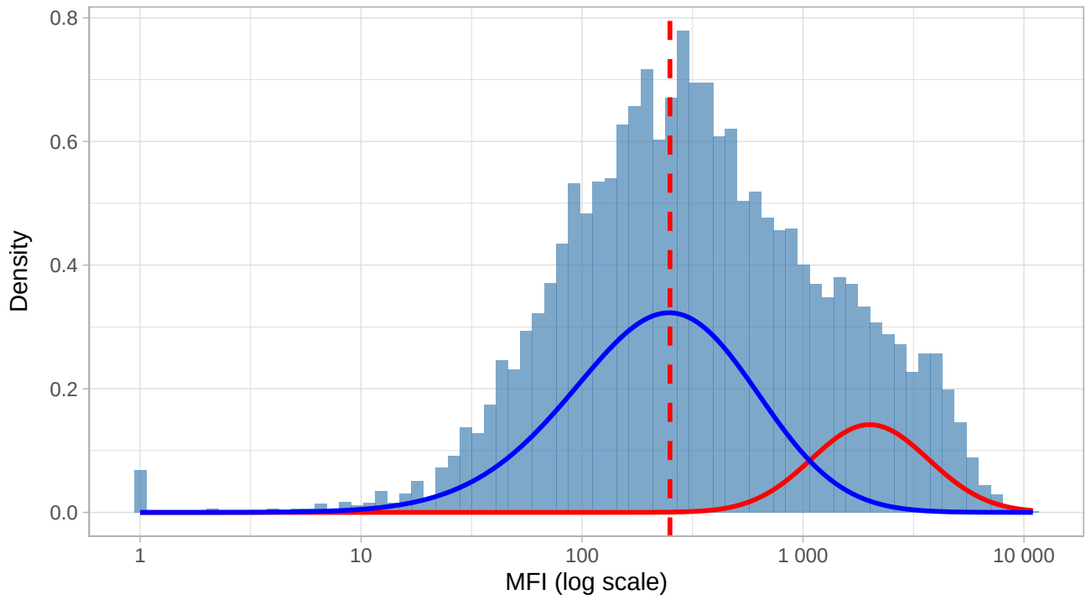


# Diagnostics: jcv_vp1

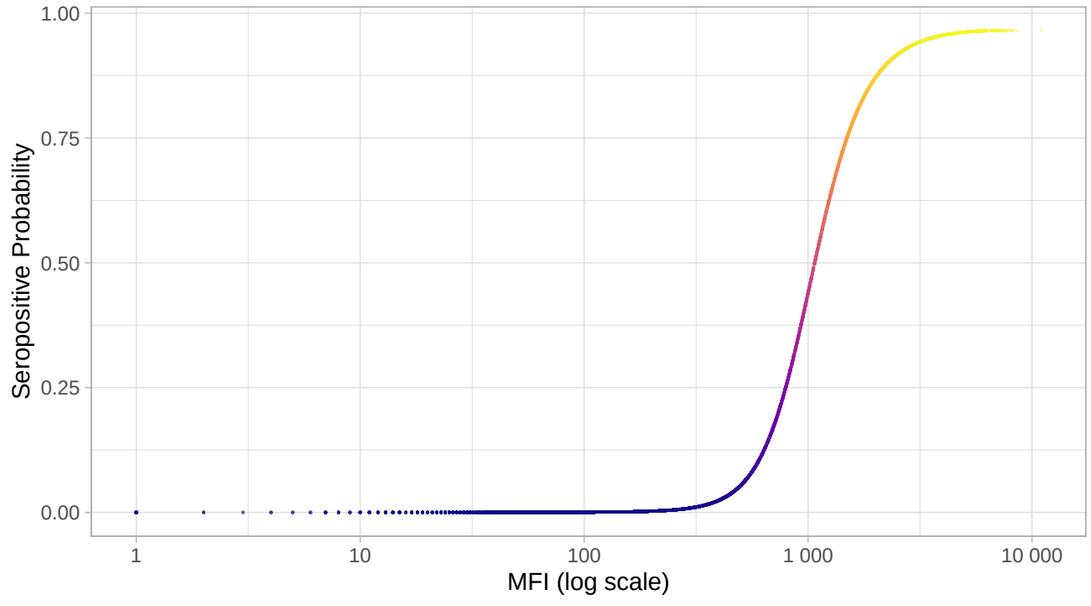
N=9424 | >0.95=461 | <0.05=5870 | Ambig=3093

## Original MFI Distribution: jcv_vp1

Hard cutoff threshold = 250

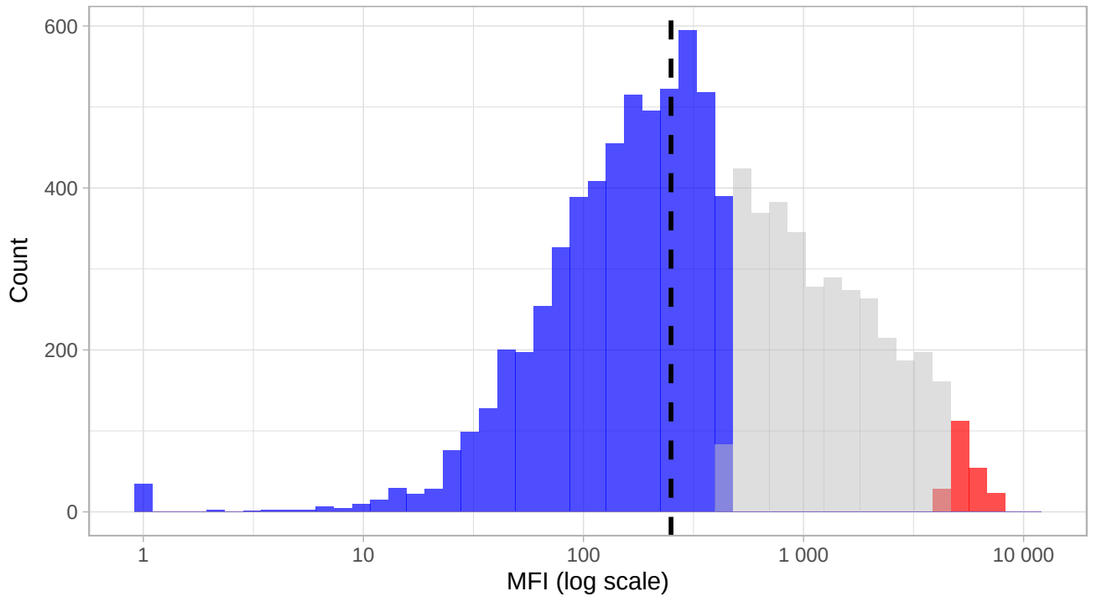



## IgG vs Seropositive Probability: jcv_vp1



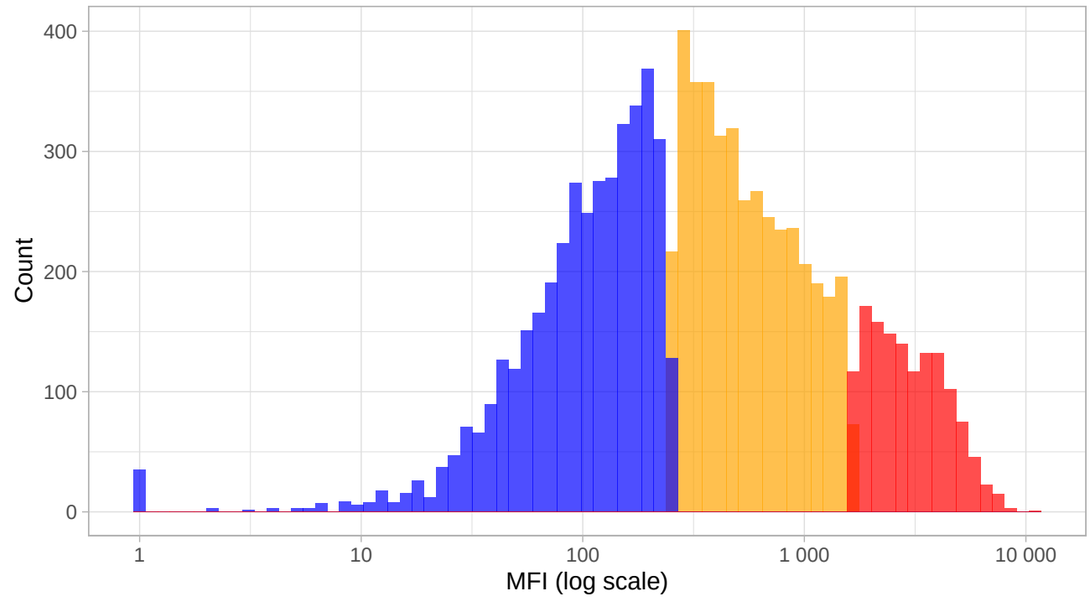

## High−Confidence Seropositive Distribution: jcv_vp1

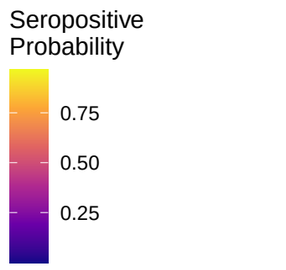
Prob threshold = 0.96




## Phenotype Distribution by Classification: jcv_vp1

Comparing hard vs soft classifications



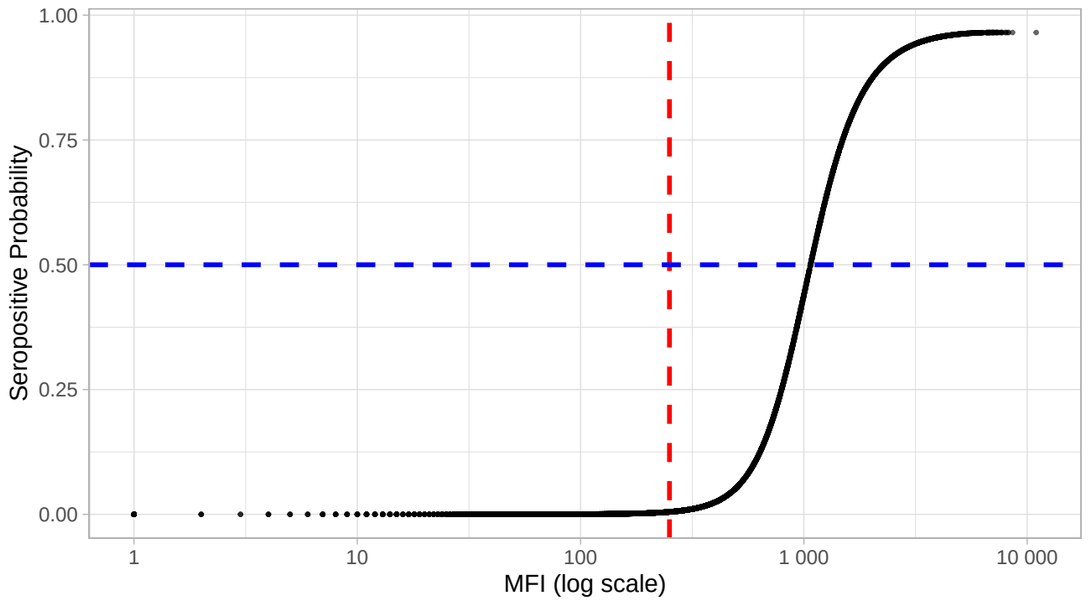







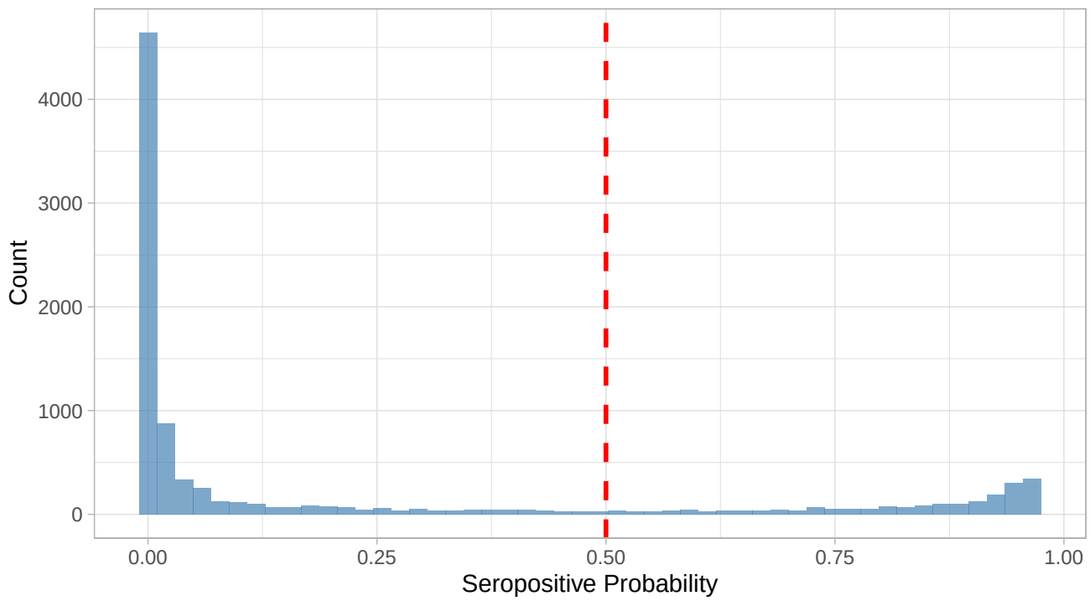

## IgG Level vs Seropositive Probability: jcv_vp1

Red line = hard threshold, Blue line = 50% probability



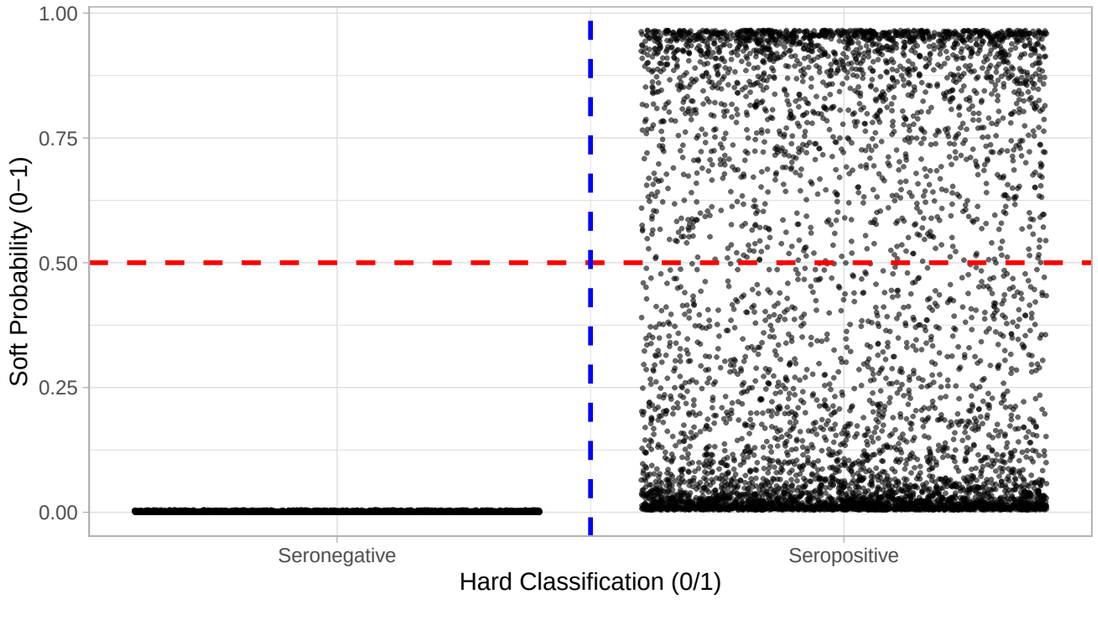

## Distribution of Seropositive Probabilities: jcv_vp1

Red line = 50% threshold



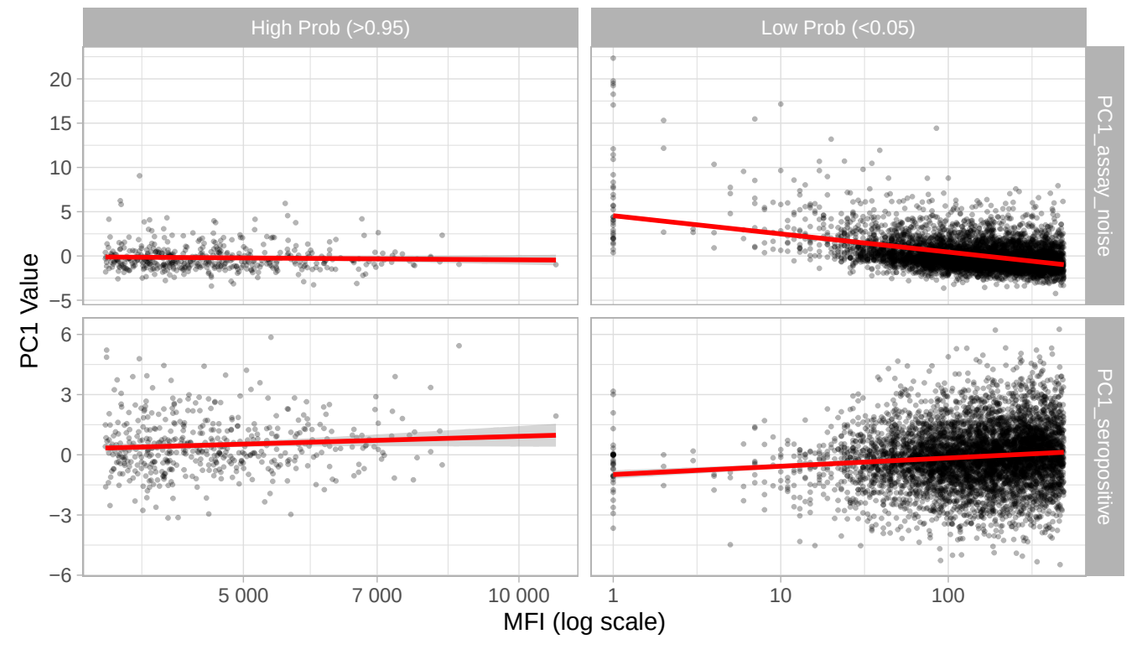

## Hard vs Soft Classification: jcv_vp1

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: jcv_vp1

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

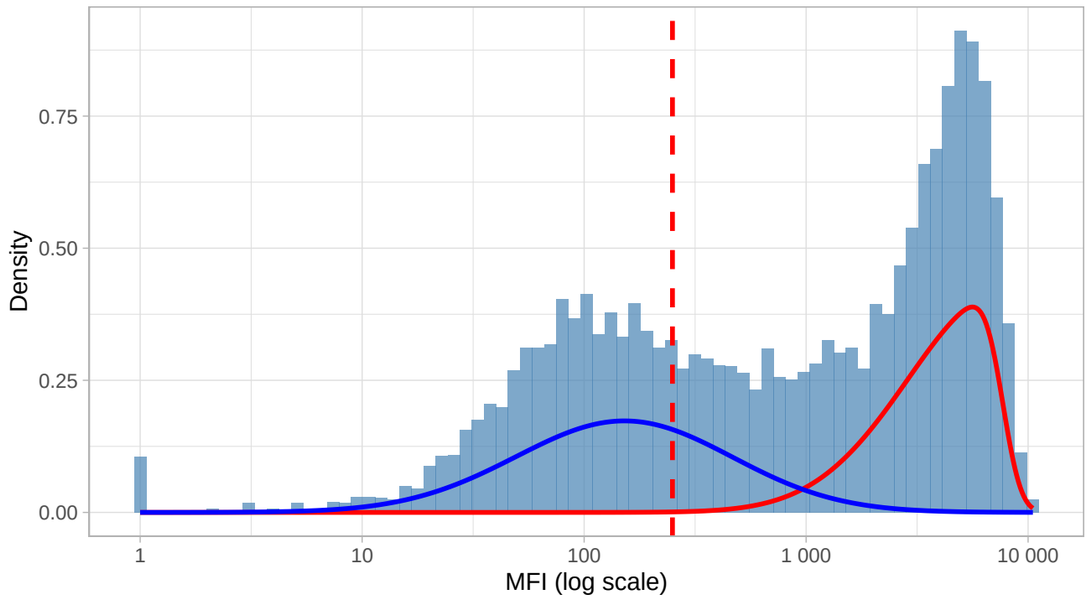


# Diagnostics: mcv_vp1

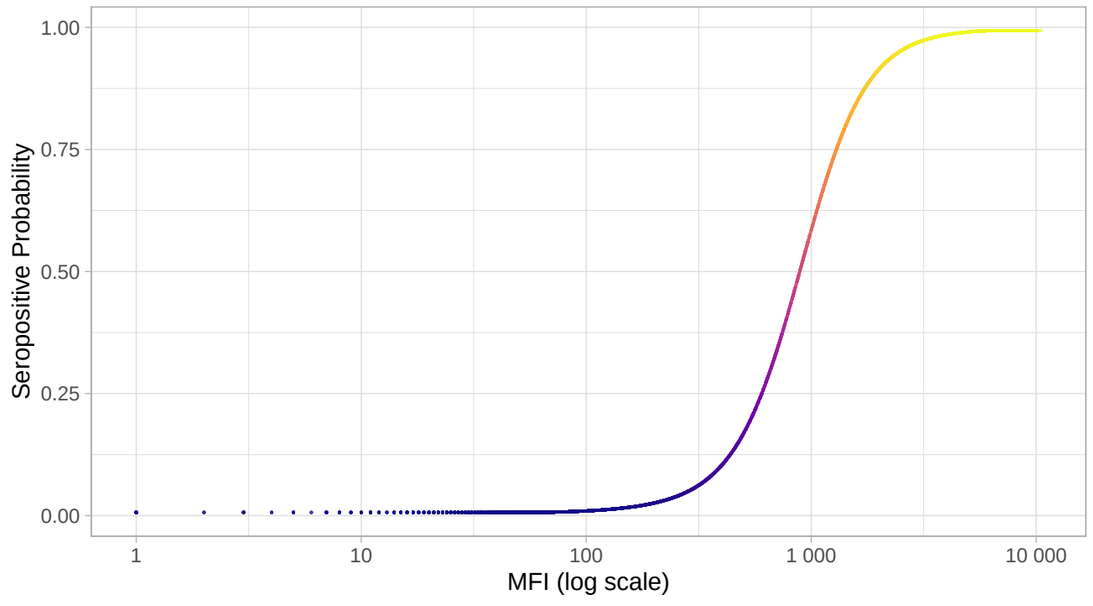
N=9424 | >0.95=3539 | <0.05=3311 | Ambig=2574

## Original MFI Distribution: mcv_vp1

Hard cutoff threshold = 250

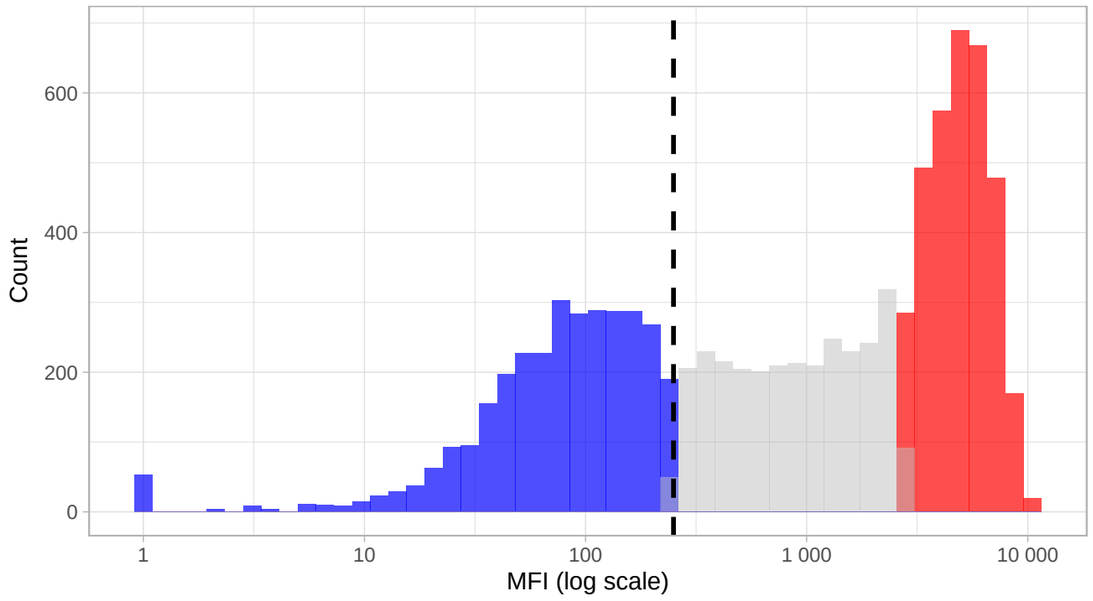



## IgG vs Seropositive Probability: mcv_vp1



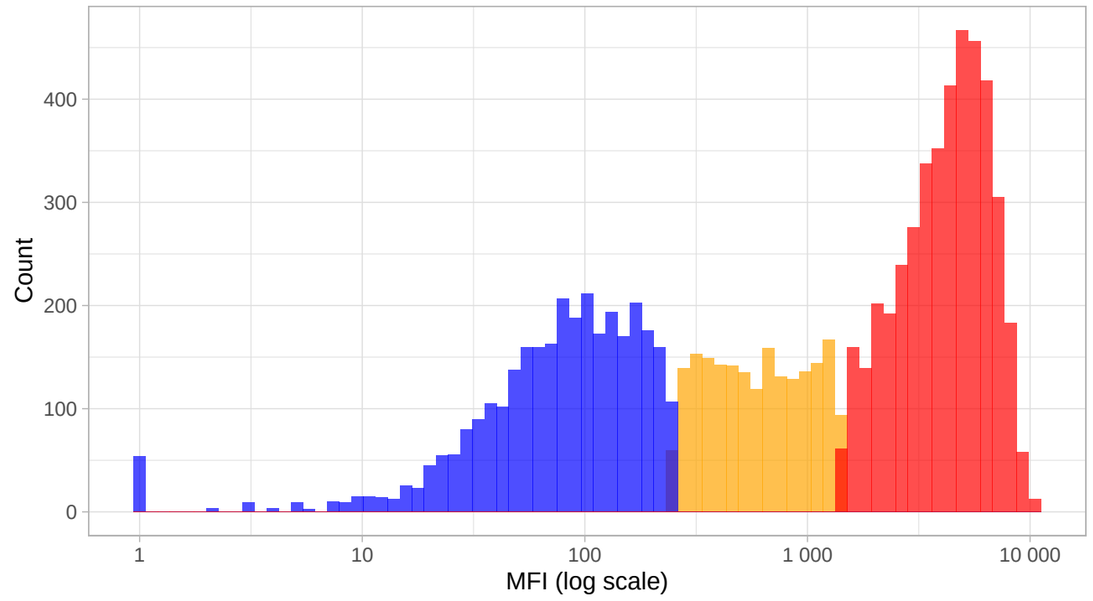

## High−Confidence Seropositive Distribution: mcv_vp1

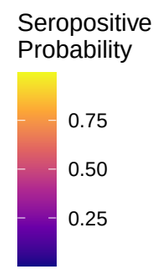
Prob threshold = 0.96

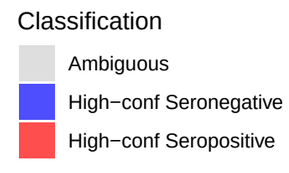


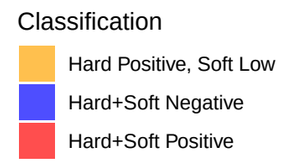

## Phenotype Distribution by Classification: mcv_vp1

Comparing hard vs soft classifications



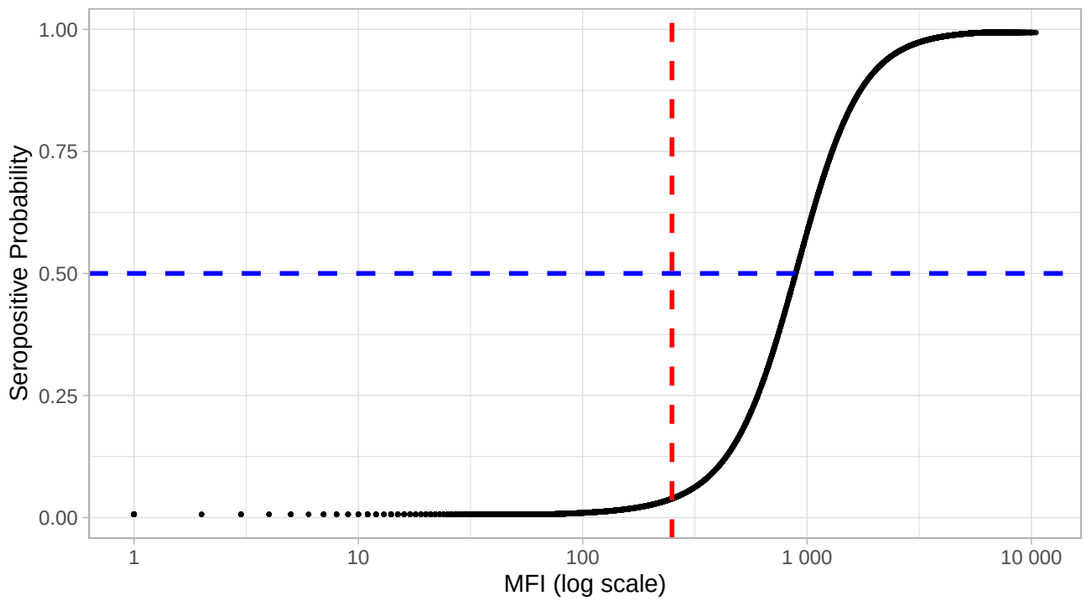



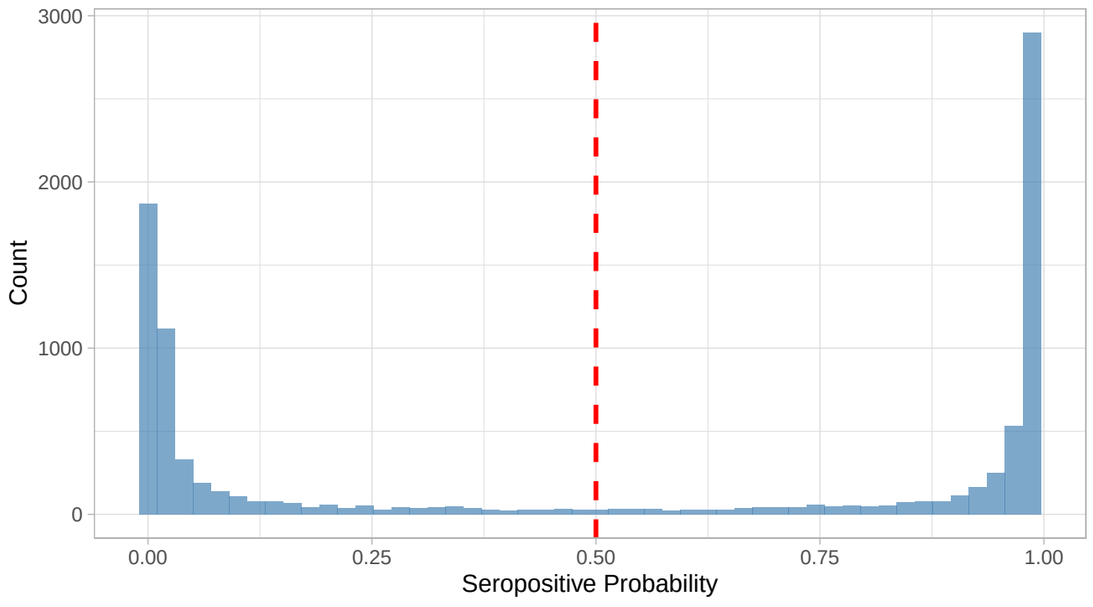

## IgG Level vs Seropositive Probability: mcv_vp1

Red line = hard threshold, Blue line = 50% probability




## Distribution of Seropositive Probabilities: mcv_vp1

Red line = 50% threshold




## Hard vs Soft Classification: mcv_vp1

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: mcv_vp1

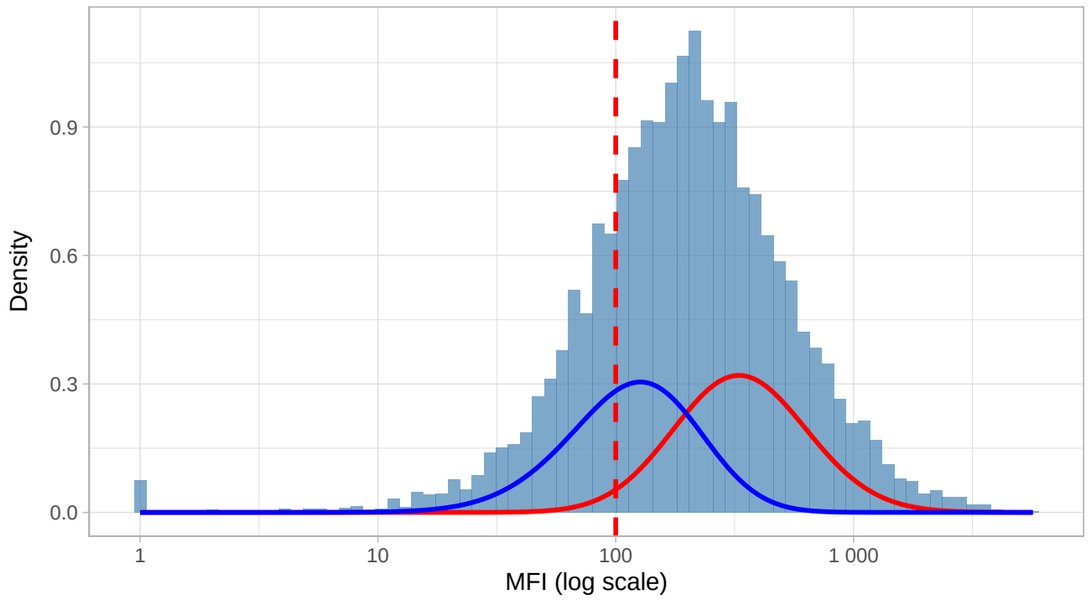
Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

# Diagnostics: hhv6_ie1a

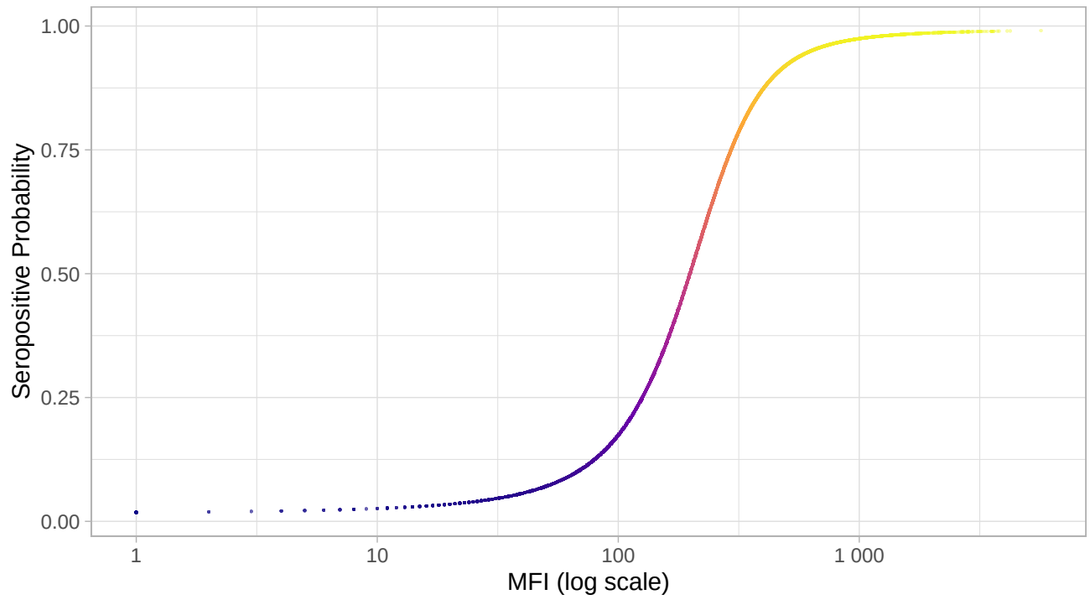
N=9424 | >0.95=1051 | <0.05=386 | Ambig=7987

## Original MFI Distribution: hhv6_ie1a

Hard cutoff threshold = 100

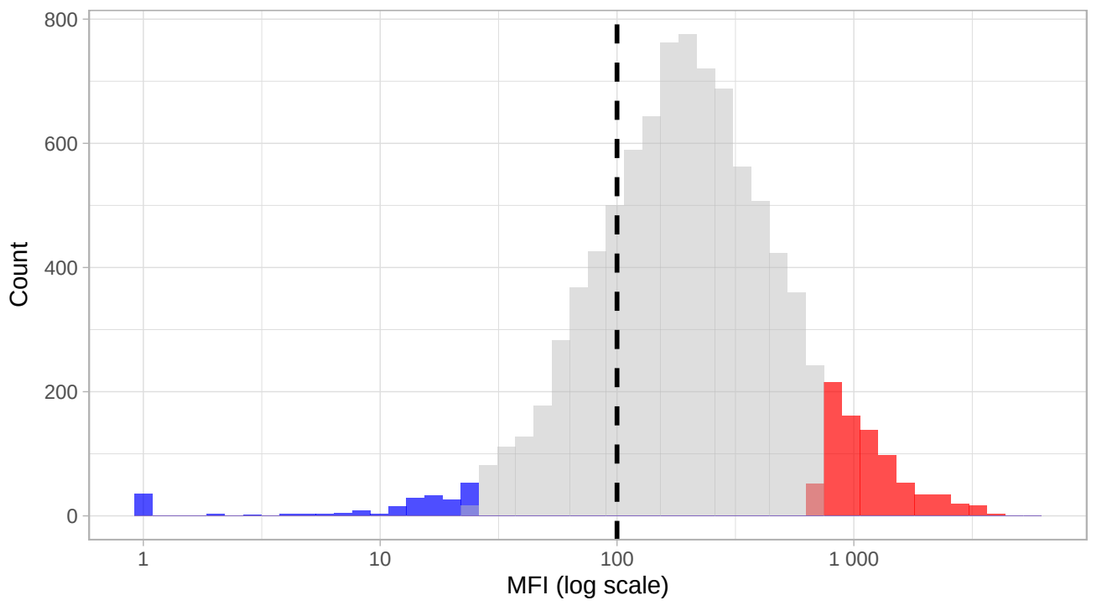



## IgG vs Seropositive Probability: hhv6_ie1a



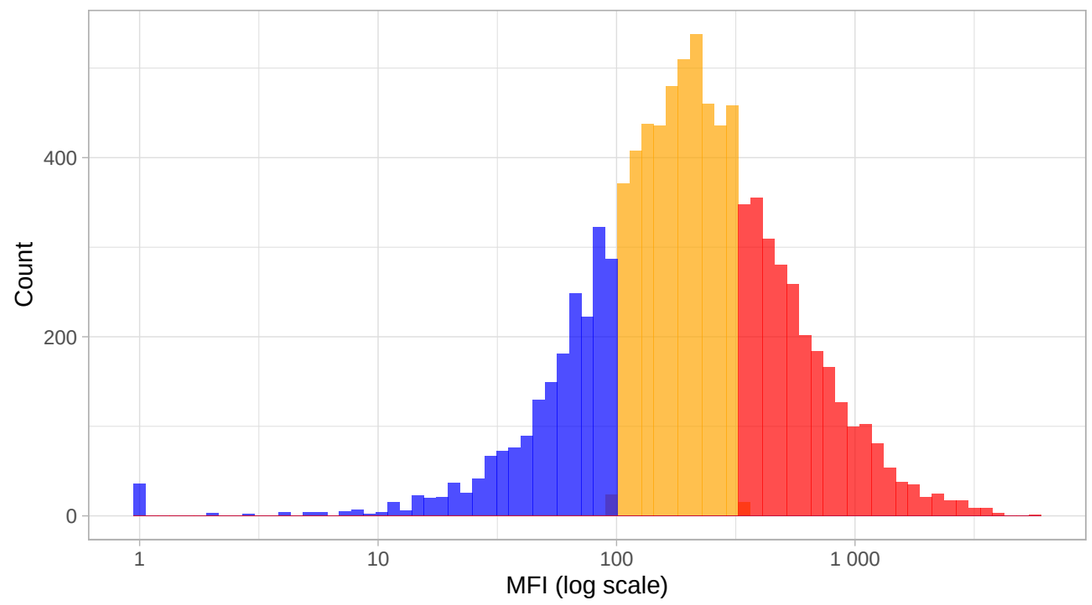

## High−Confidence Seropositive Distribution: hhv6_ie1a

Prob threshold = 0.96



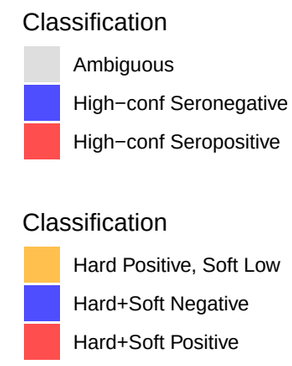

## Phenotype Distribution by Classification: hhv6_ie1a

Comparing hard vs soft classifications







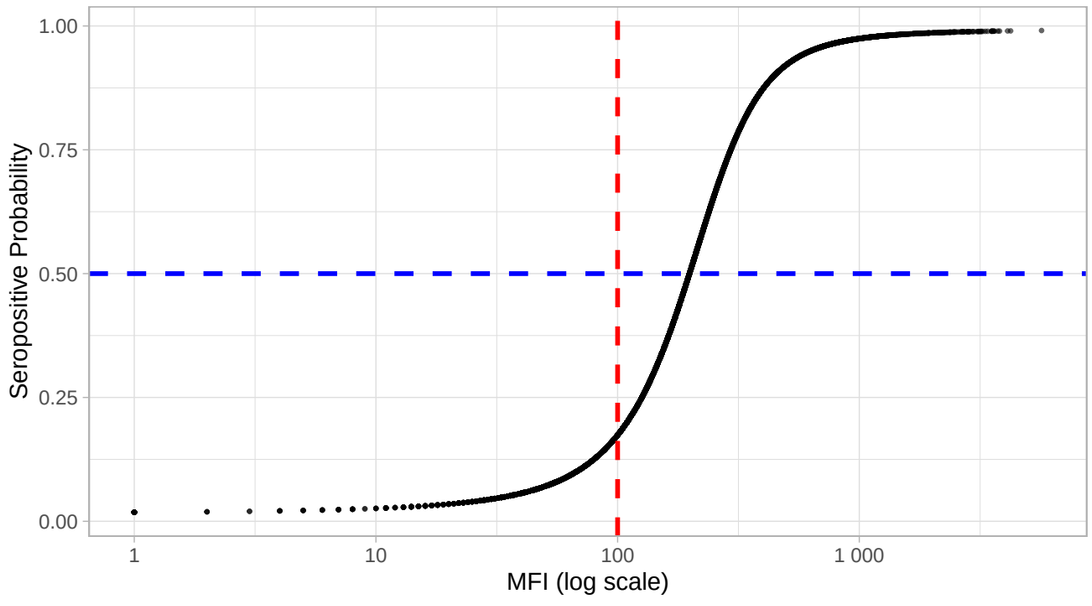






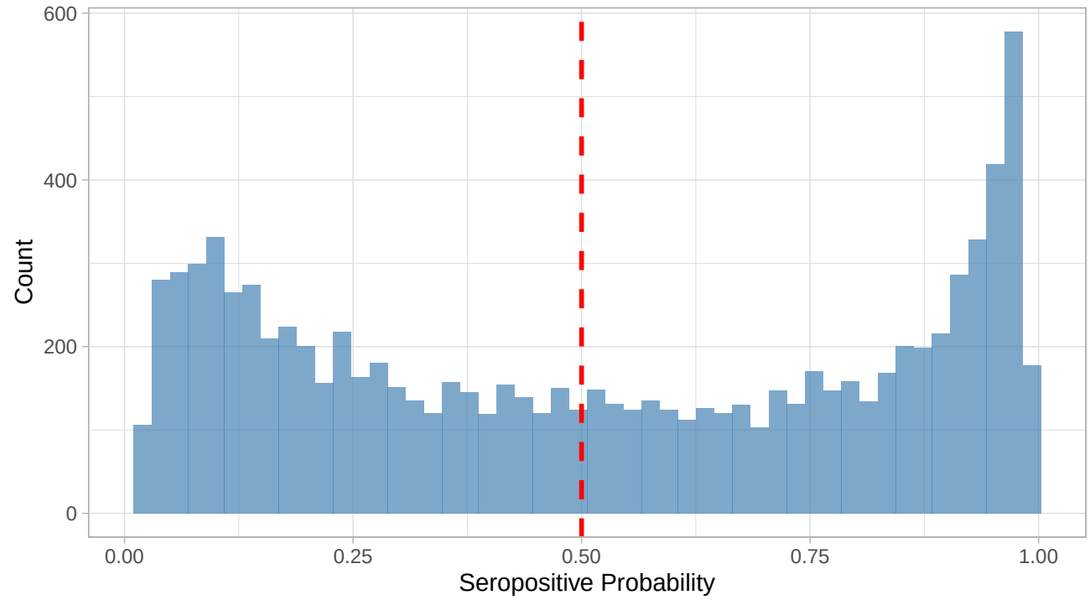
## IgG Level vs Seropositive Probability: hhv6_ie1a

Red line = hard threshold, Blue line = 50% probability



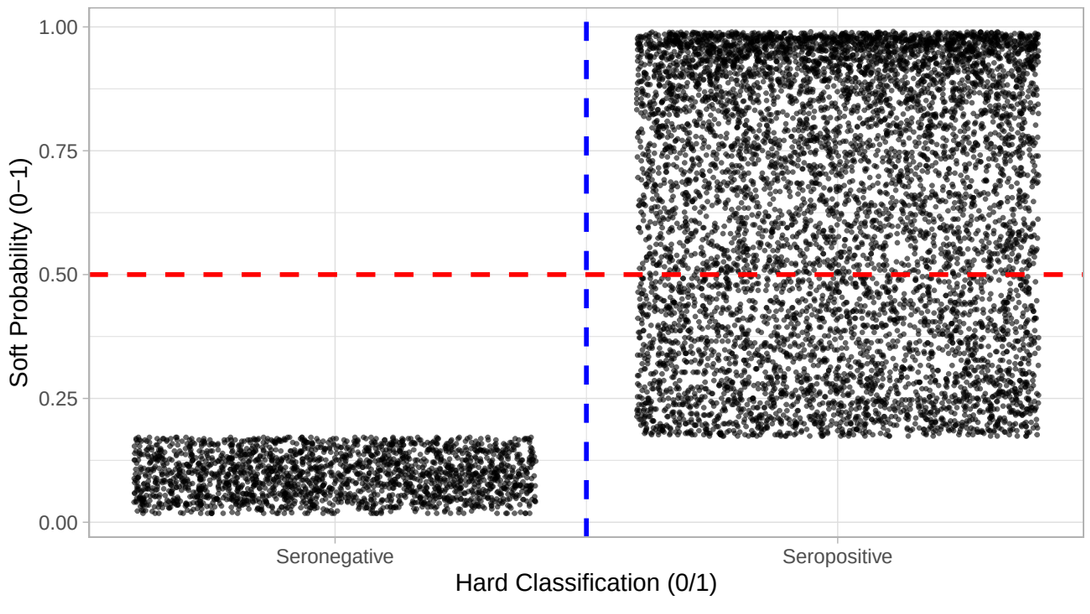

## Distribution of Seropositive Probabilities: hhv6_ie1a

Red line = 50% threshold



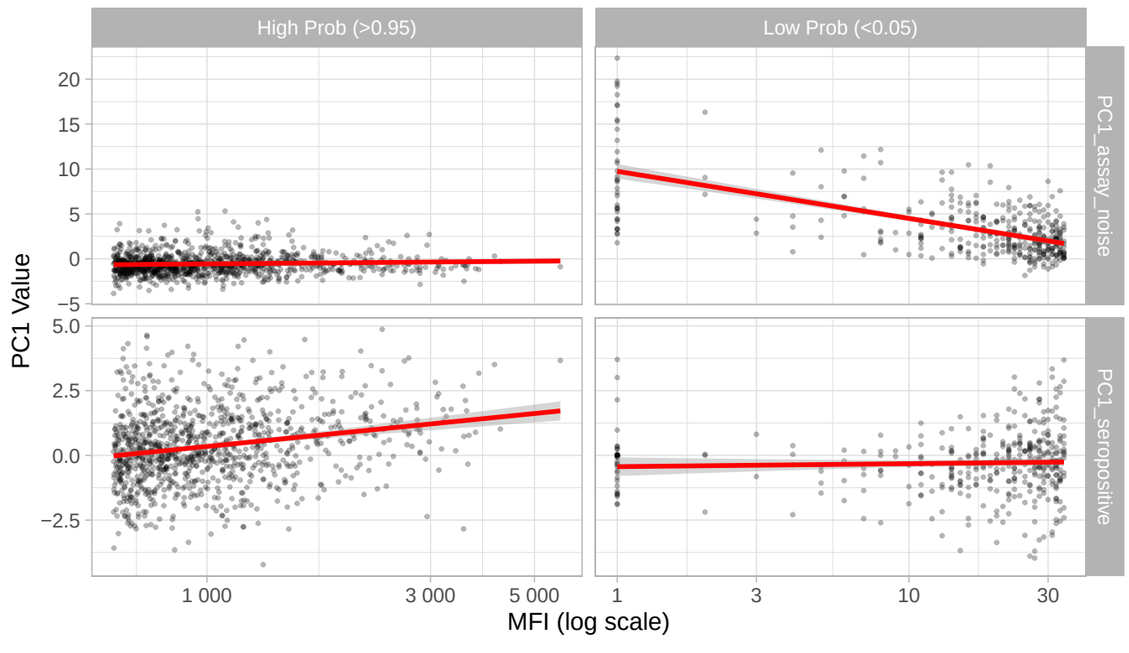

## Hard vs Soft Classification: hhv6_ie1a

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: hhv6_ie1a

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

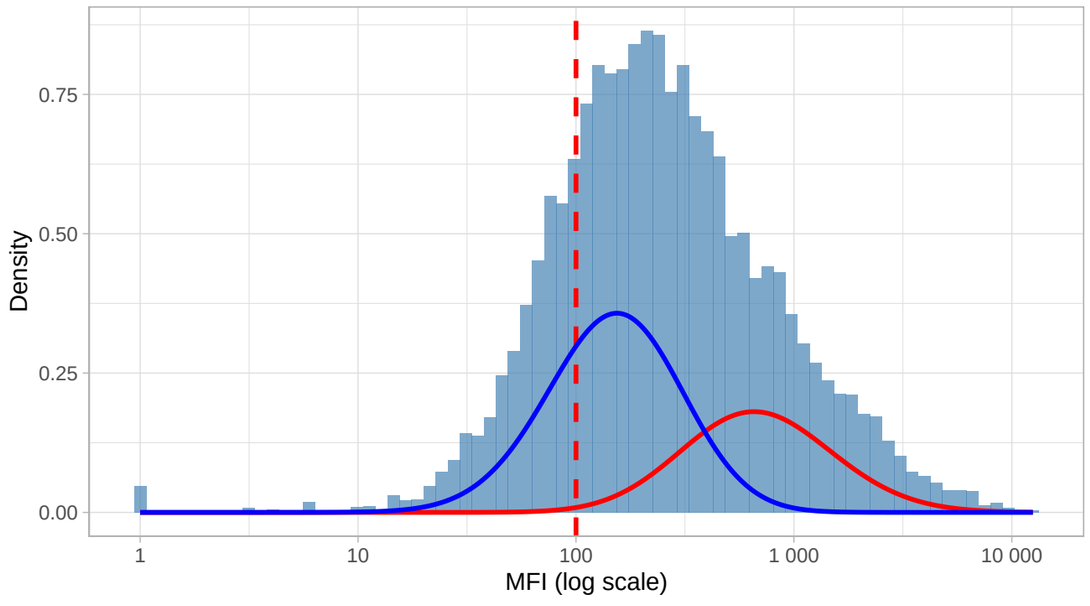


# Diagnostics: hhv6_ie1b

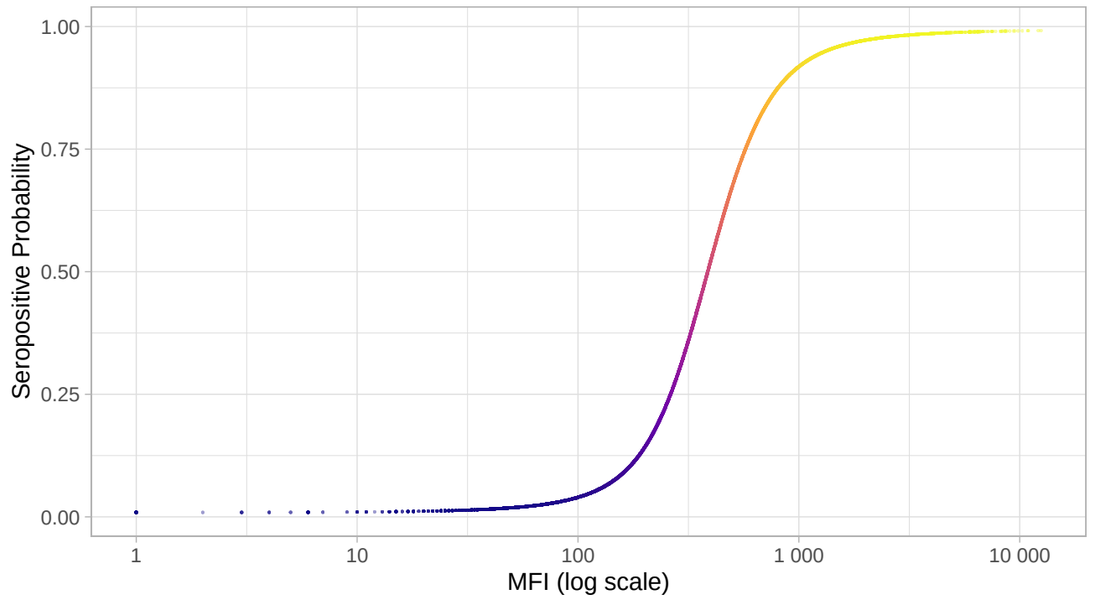
N=9424 | >0.95=842 | <0.05=2359 | Ambig=6223

## Original MFI Distribution: hhv6_ie1b

Hard cutoff threshold = 100

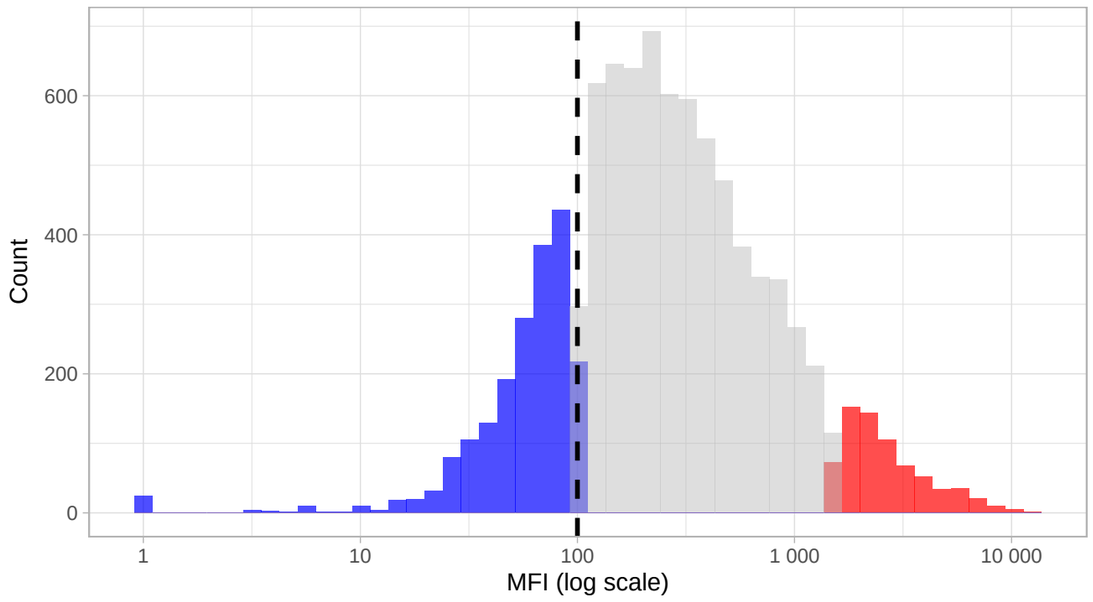



## IgG vs Seropositive Probability: hhv6_ie1b



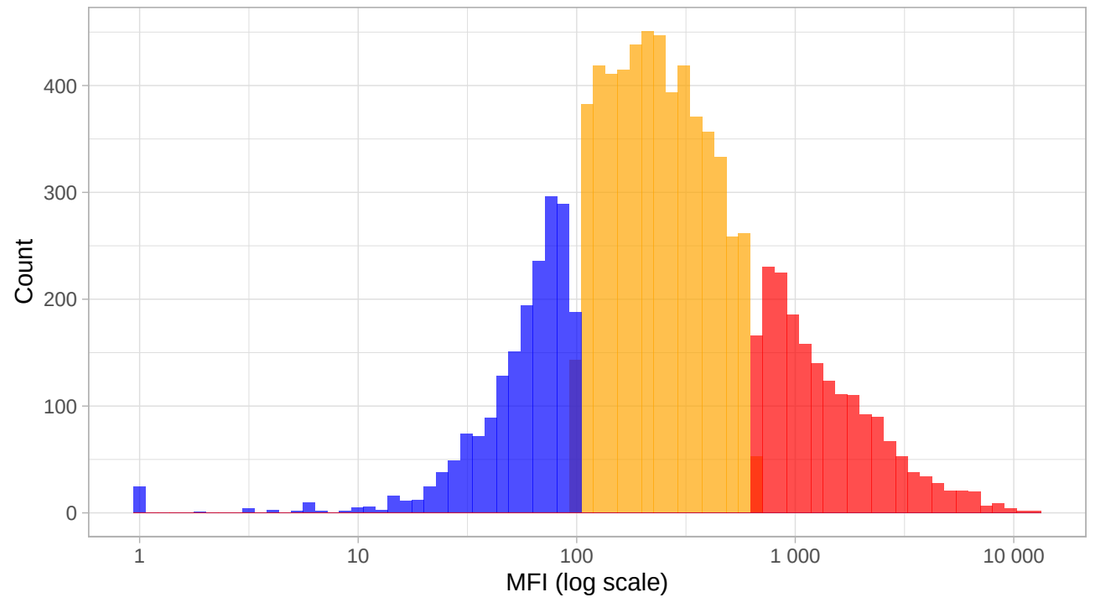

## High−Confidence Seropositive Distribution: hhv6_ie1b

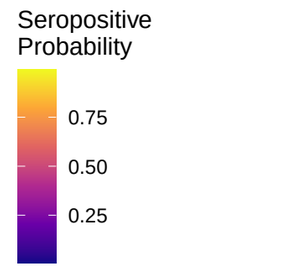
Prob threshold = 0.96




## Phenotype Distribution by Classification: hhv6_ie1b

Comparing hard vs soft classifications



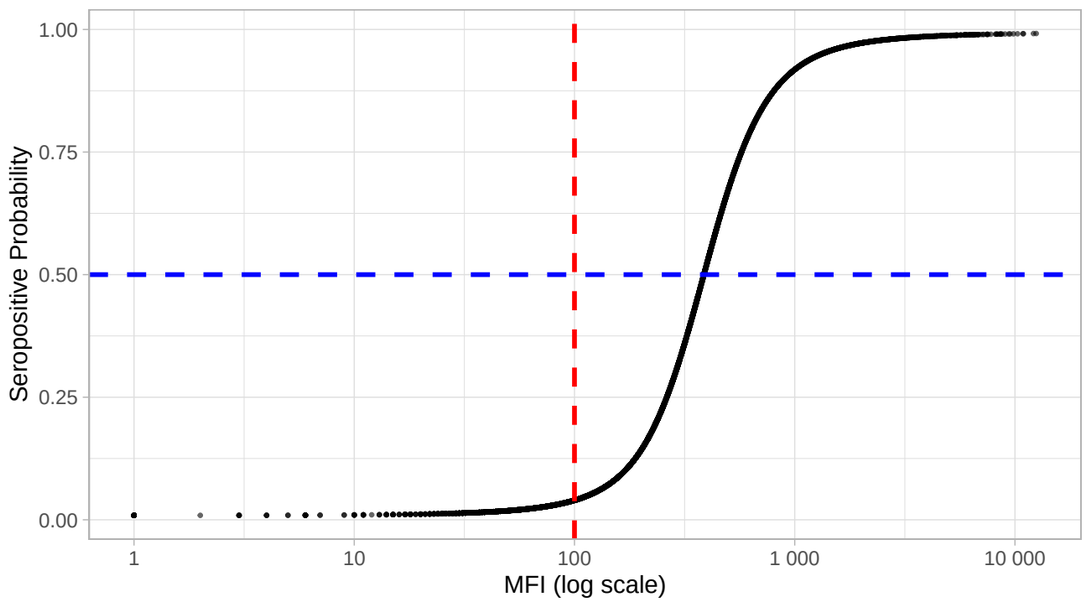







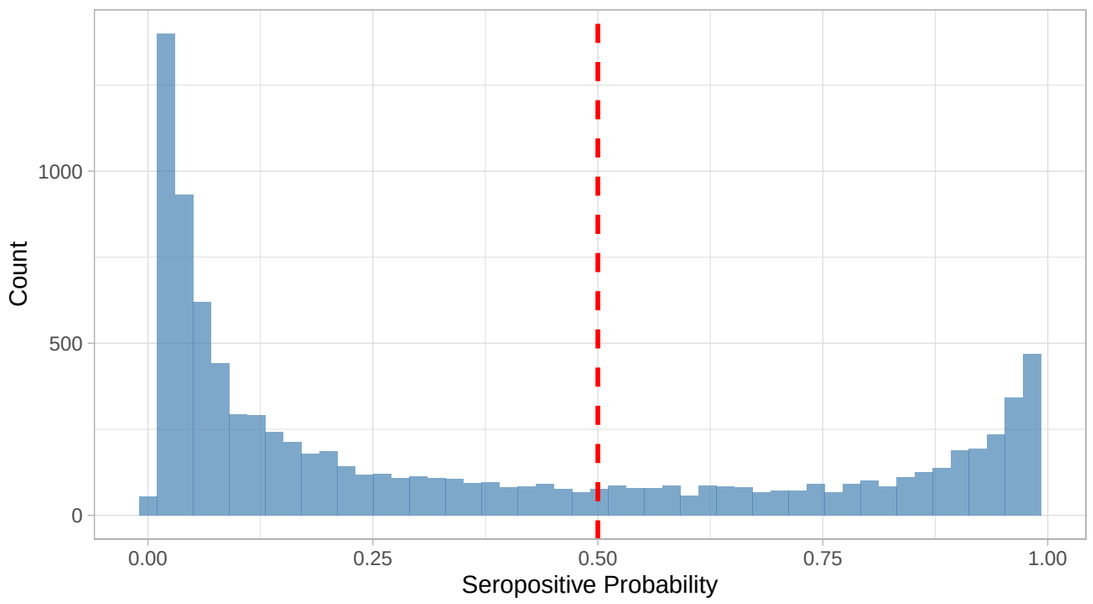

## IgG Level vs Seropositive Probability: hhv6_ie1b

Red line = hard threshold, Blue line = 50% probability



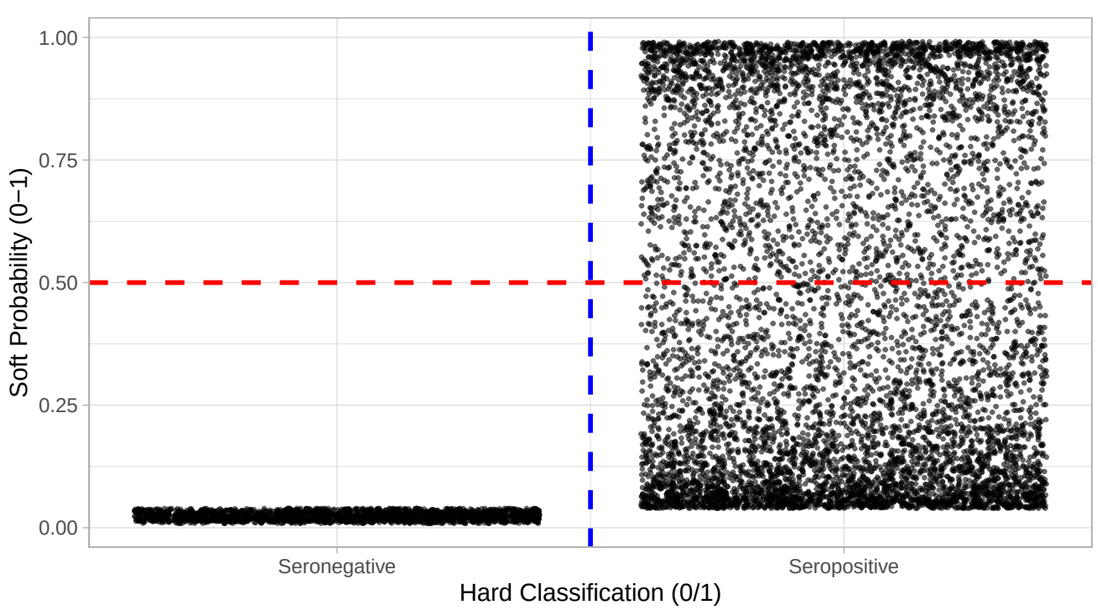

## Distribution of Seropositive Probabilities: hhv6_ie1b

Red line = 50% threshold



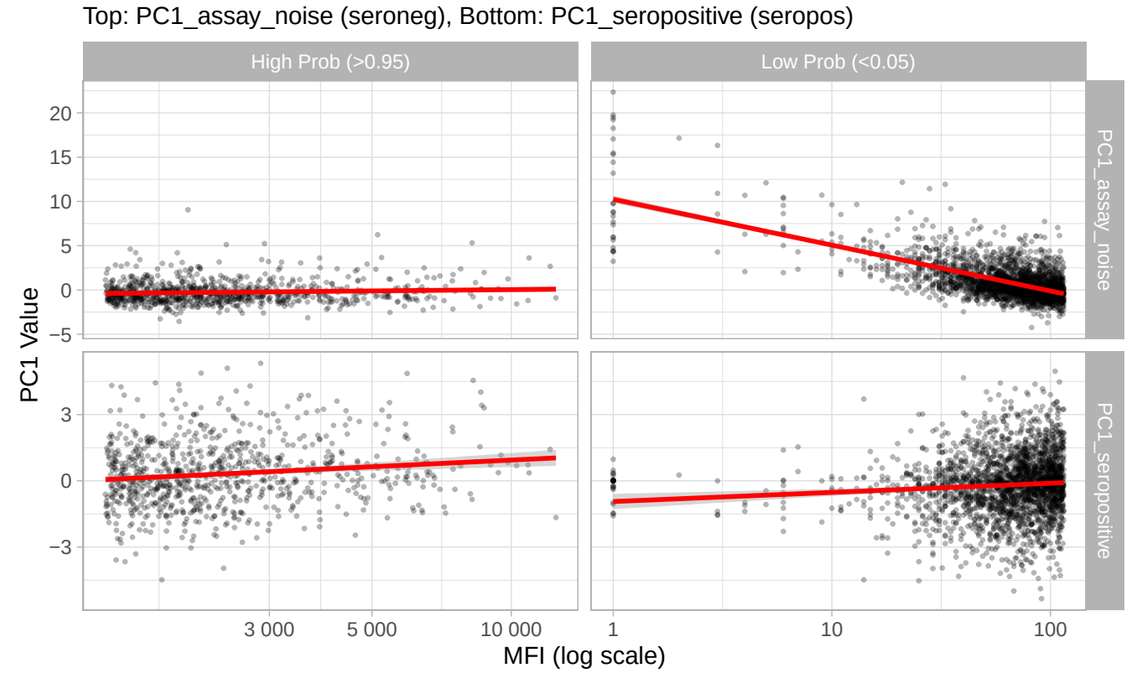

## Hard vs Soft Classification: hhv6_ie1b

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: hhv6_ie1b

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

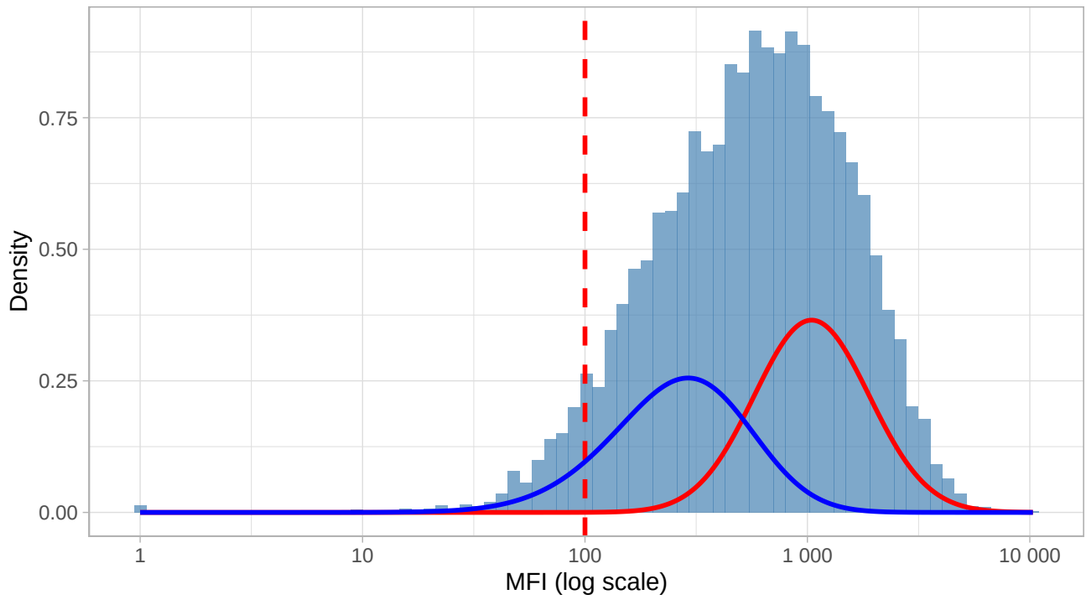


# Diagnostics: hhv7_u14

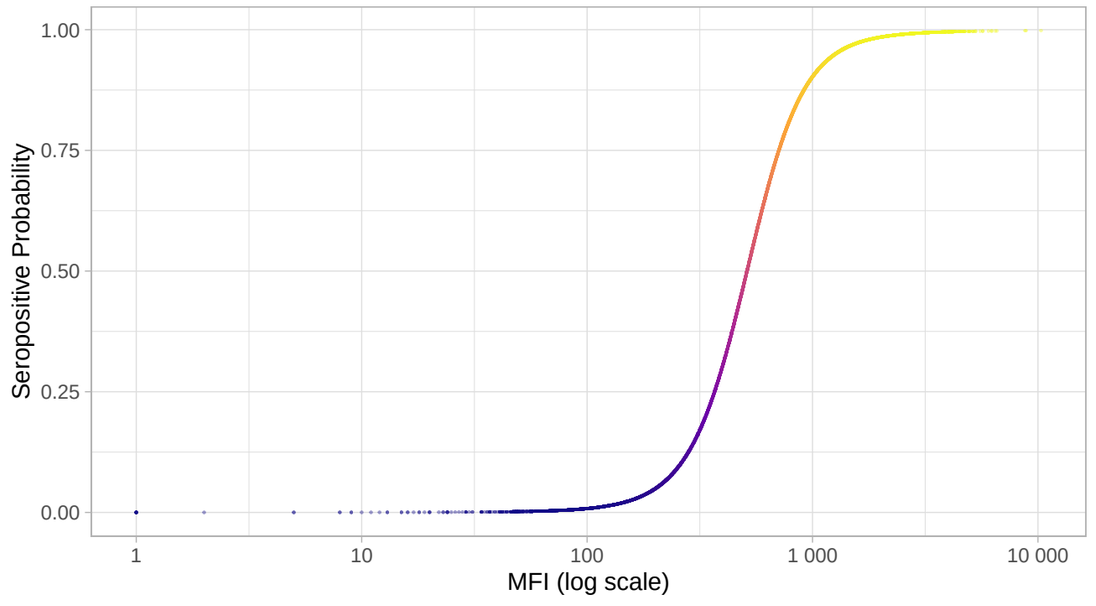
N=9424 | >0.95=2044 | <0.05=1570 | Ambig=5810

## Original MFI Distribution: hhv7_u14

Hard cutoff threshold = 100

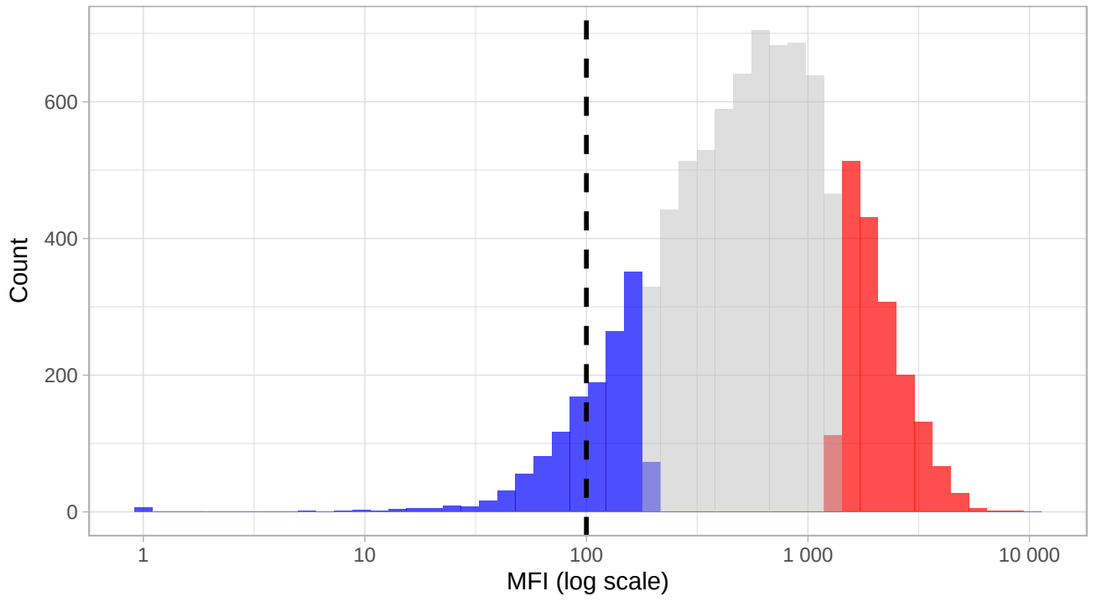



## IgG vs Seropositive Probability: hhv7_u14



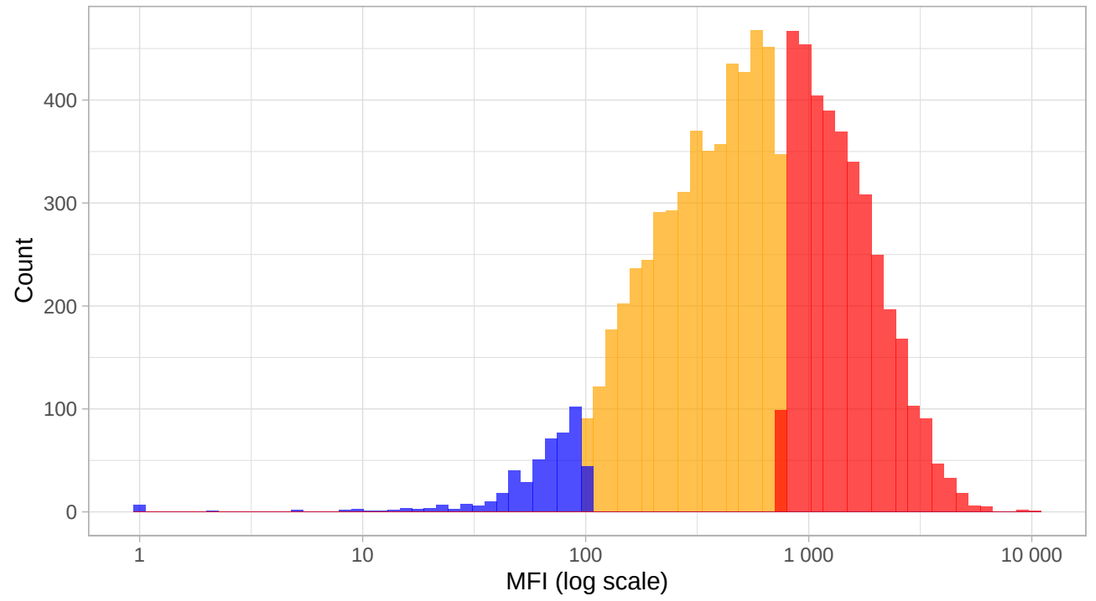

## High−Confidence Seropositive Distribution: hhv7_u14

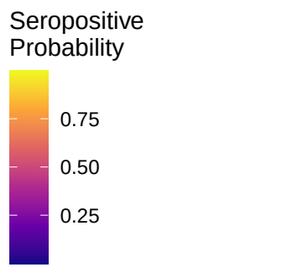
Prob threshold = 0.96




## Phenotype Distribution by Classification: hhv7_u14

Comparing hard vs soft classifications



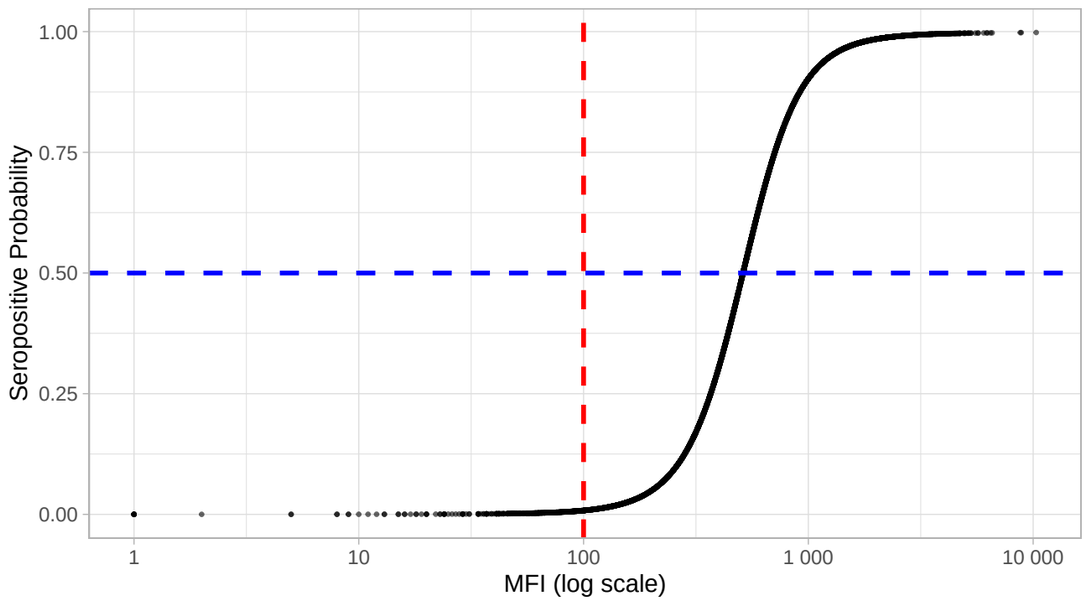







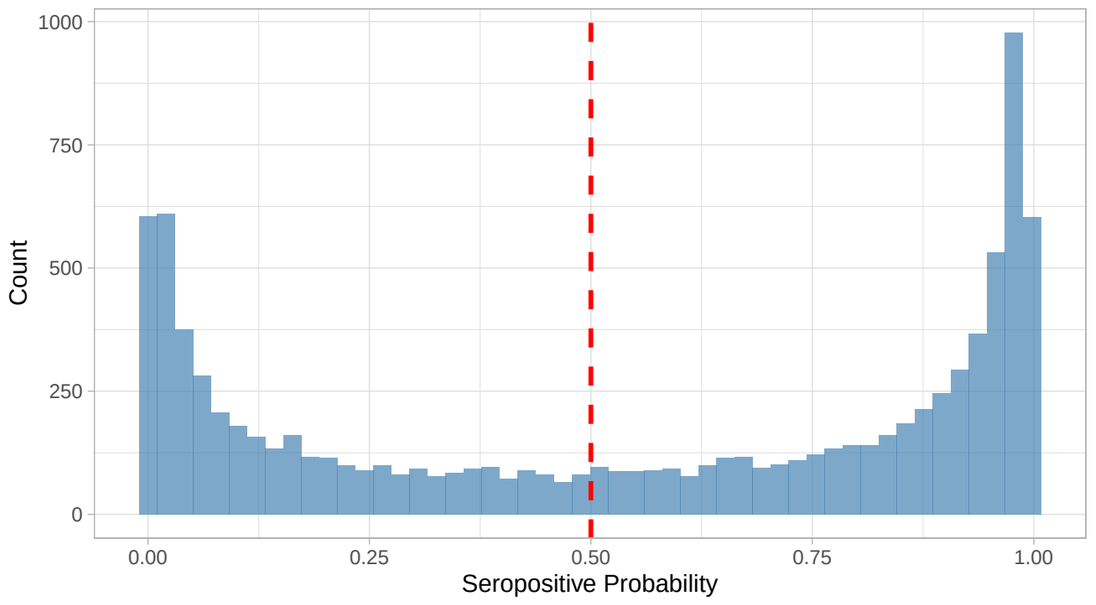

## IgG Level vs Seropositive Probability: hhv7_u14

Red line = hard threshold, Blue line = 50% probability



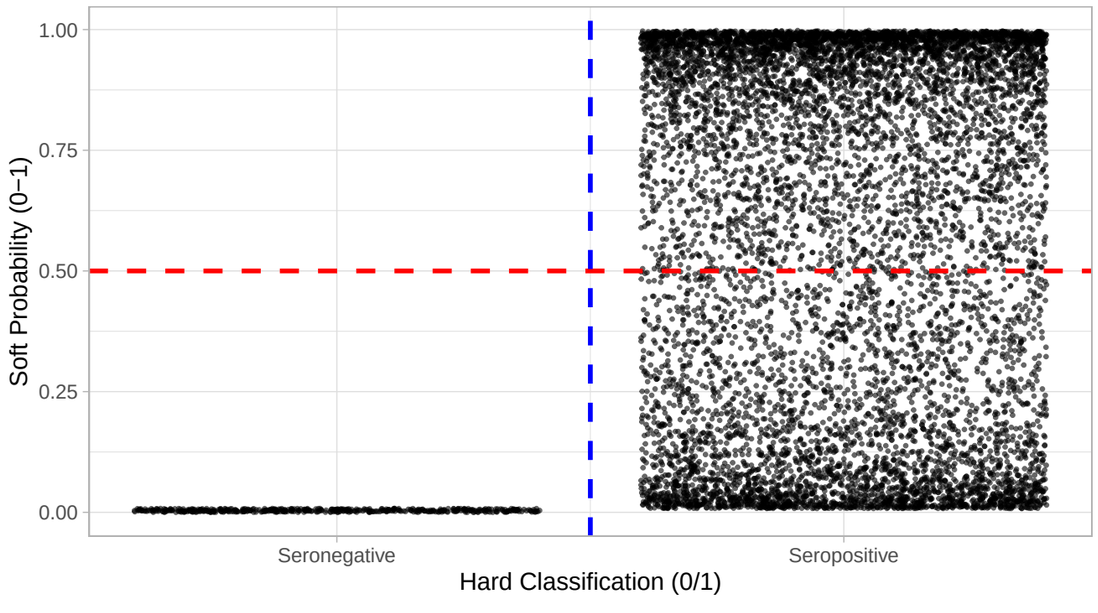

## Distribution of Seropositive Probabilities: hhv7_u14

Red line = 50% threshold



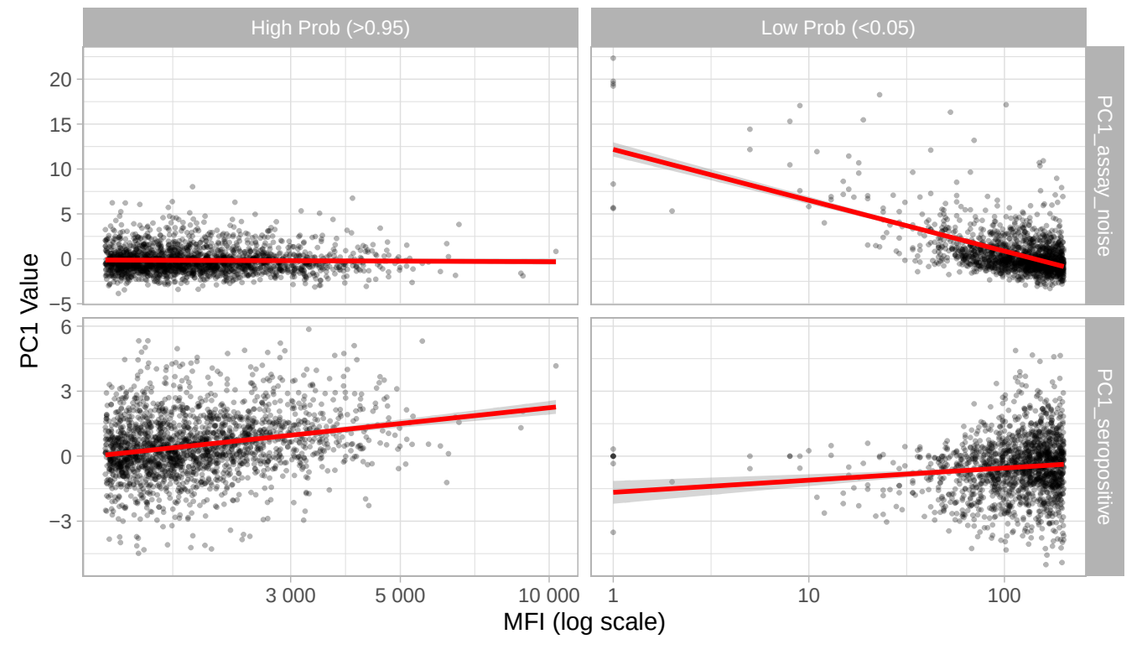

## Hard vs Soft Classification: hhv7_u14

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: hhv7_u14

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

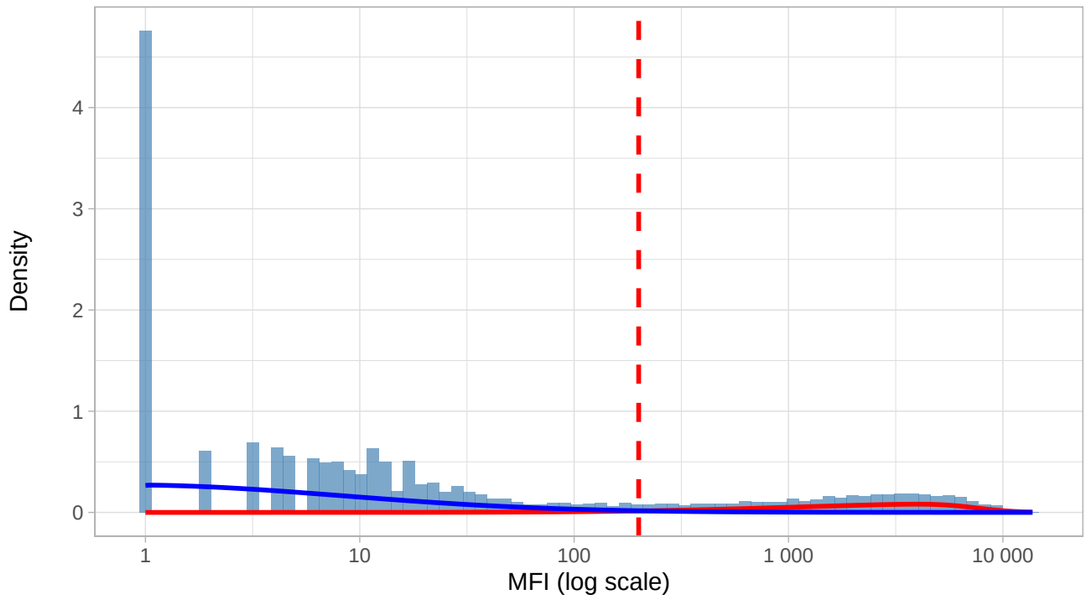


# Diagnostics: ct_pgp3

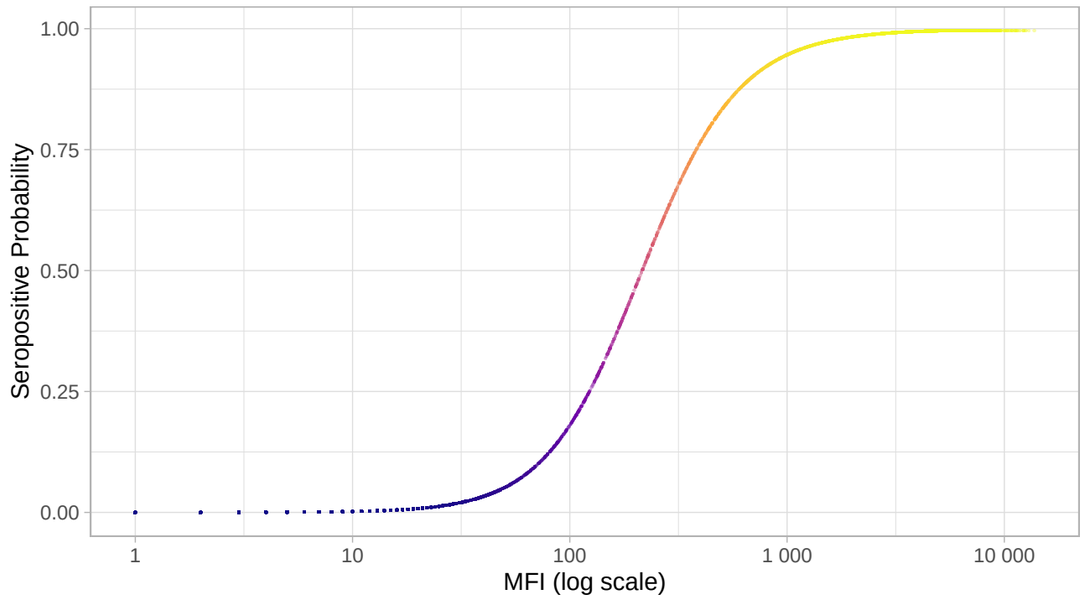
N=9424 | >0.95=1392 | <0.05=6906 | Ambig=1126

## Original MFI Distribution: ct_pgp3

Hard cutoff threshold = 200

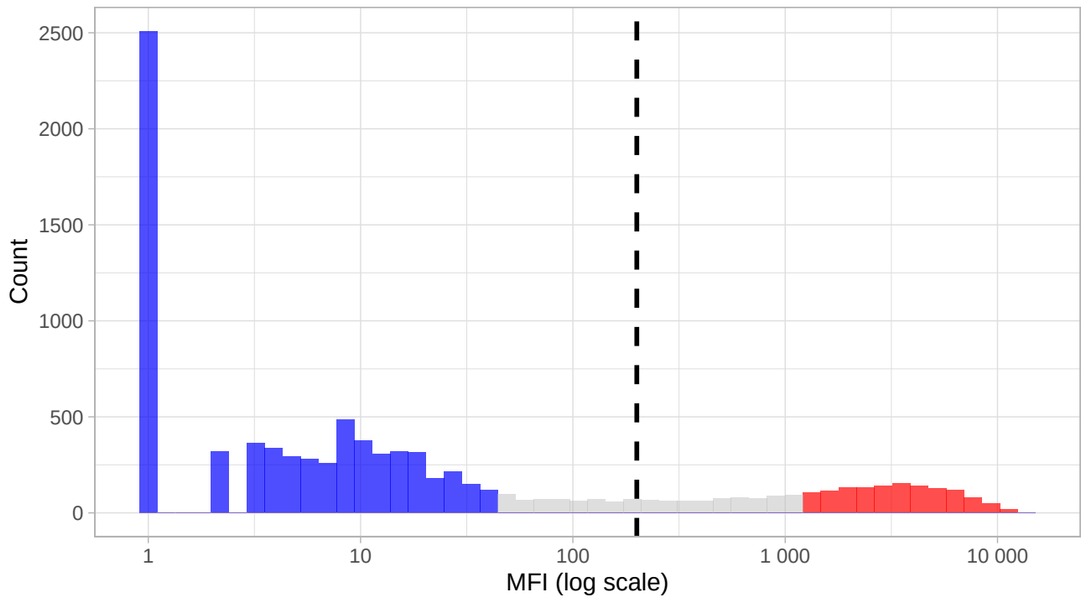



## IgG vs Seropositive Probability: ct_pgp3



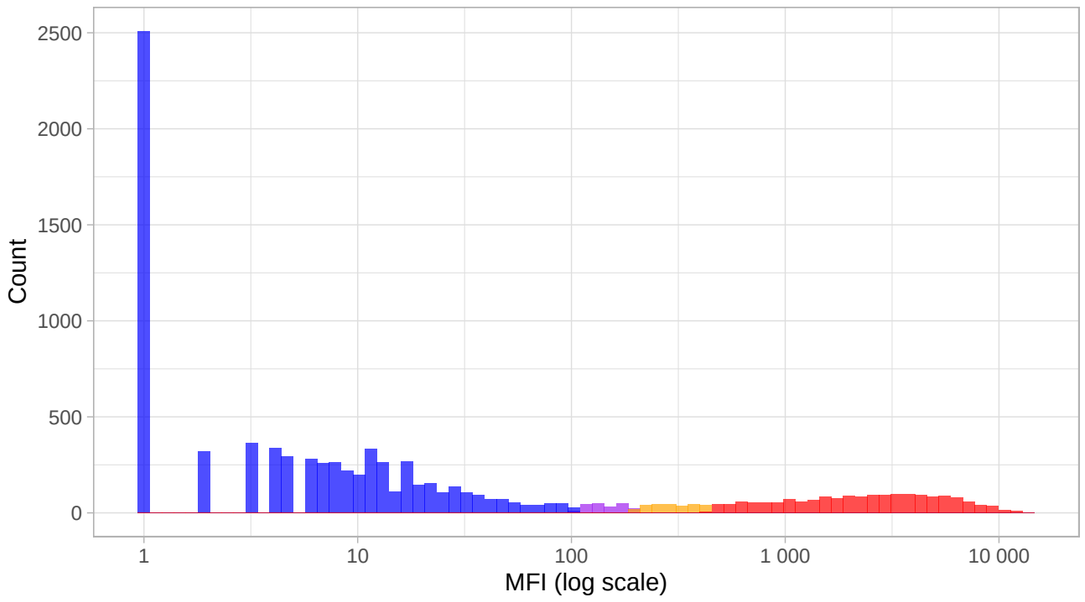

## High−Confidence Seropositive Distribution: ct_pgp3

Prob threshold = 0.96



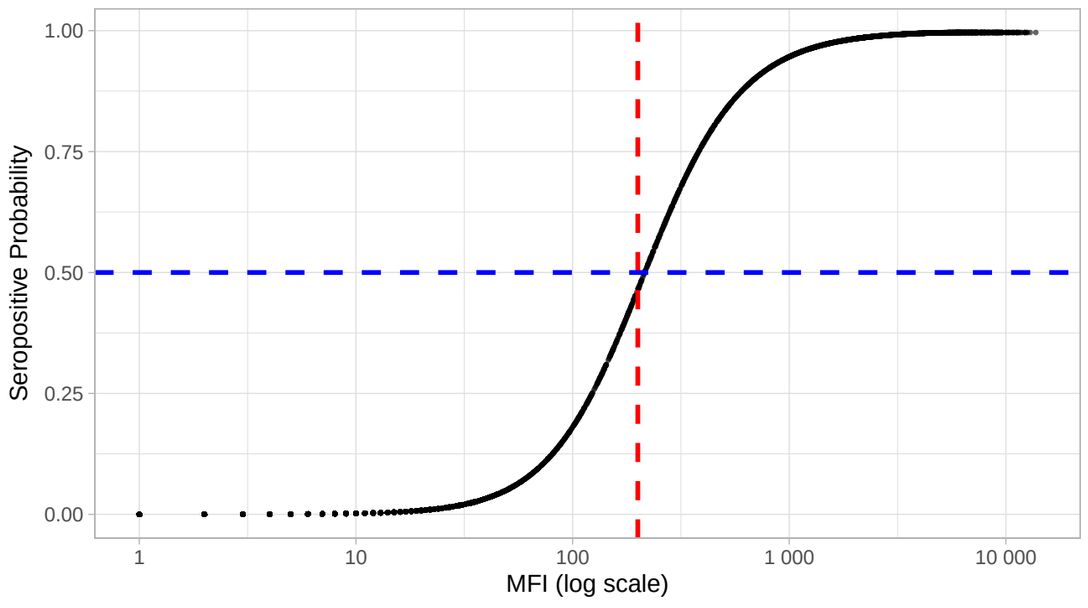

## Phenotype Distribution by Classification: ct_pgp3

Comparing hard vs soft classifications



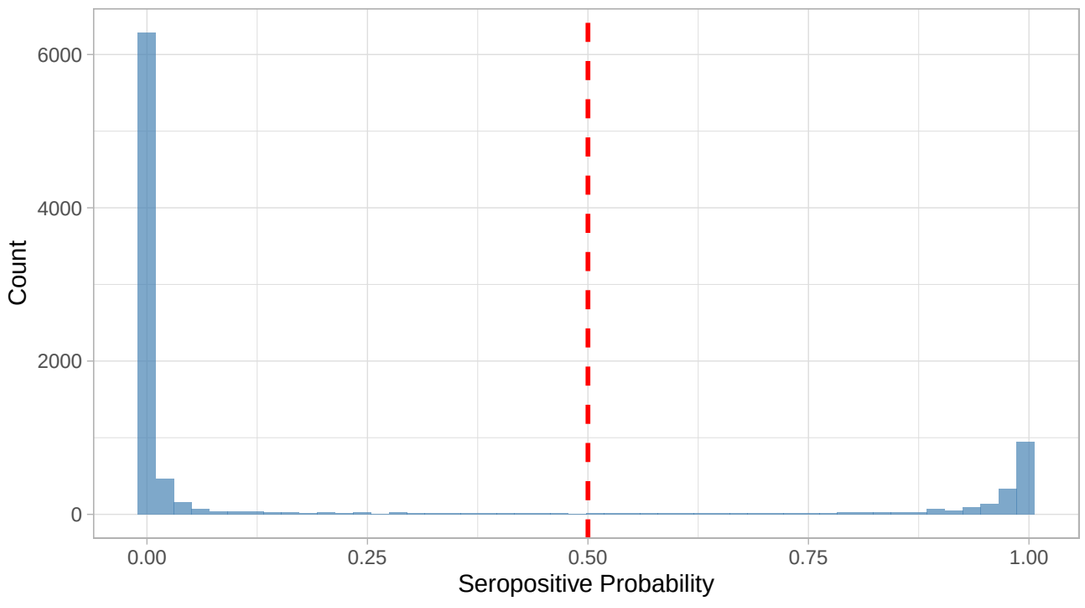

## IgG Level vs Seropositive Probability: ct_pgp3

Red line = hard threshold, Blue line = 50% probability



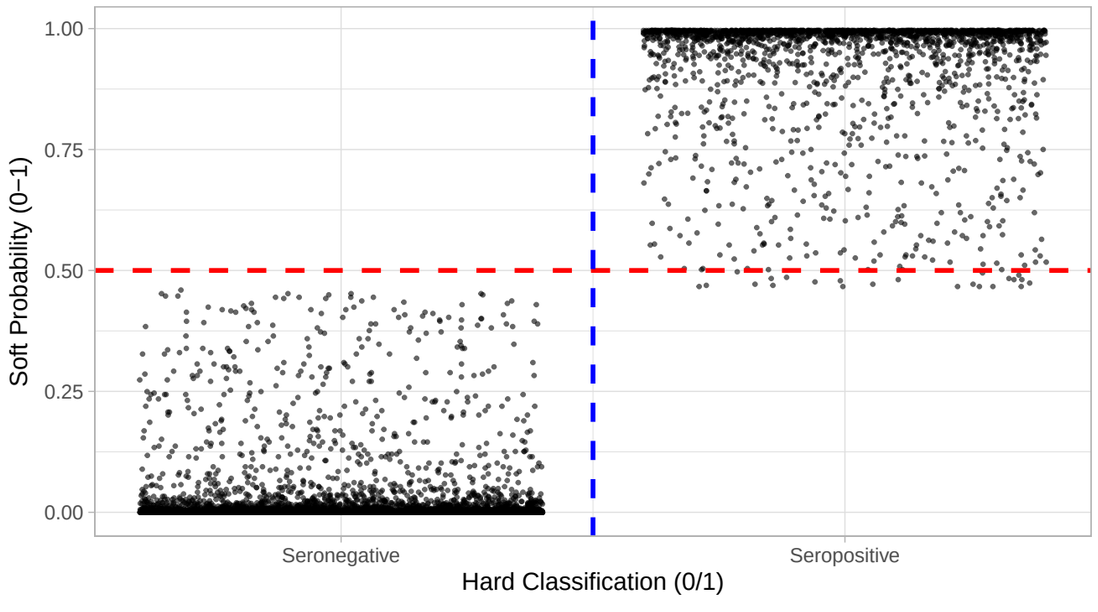

## Distribution of Seropositive Probabilities: ct_pgp3

Red line = 50% threshold



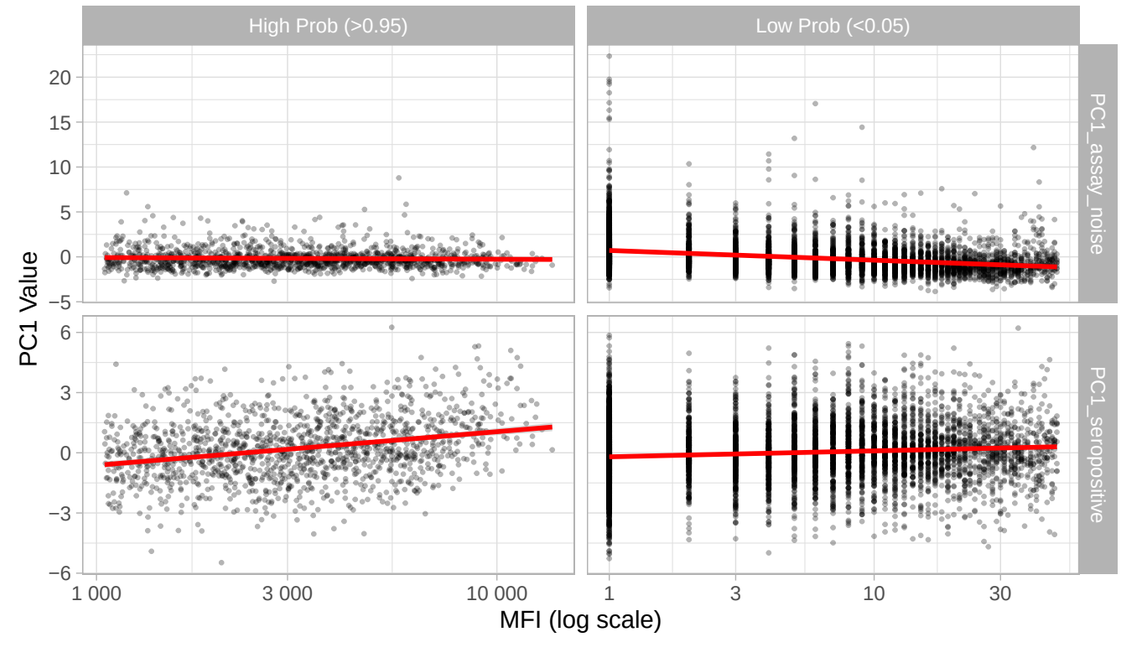

## Hard vs Soft Classification: ct_pgp3

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: ct_pgp3

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

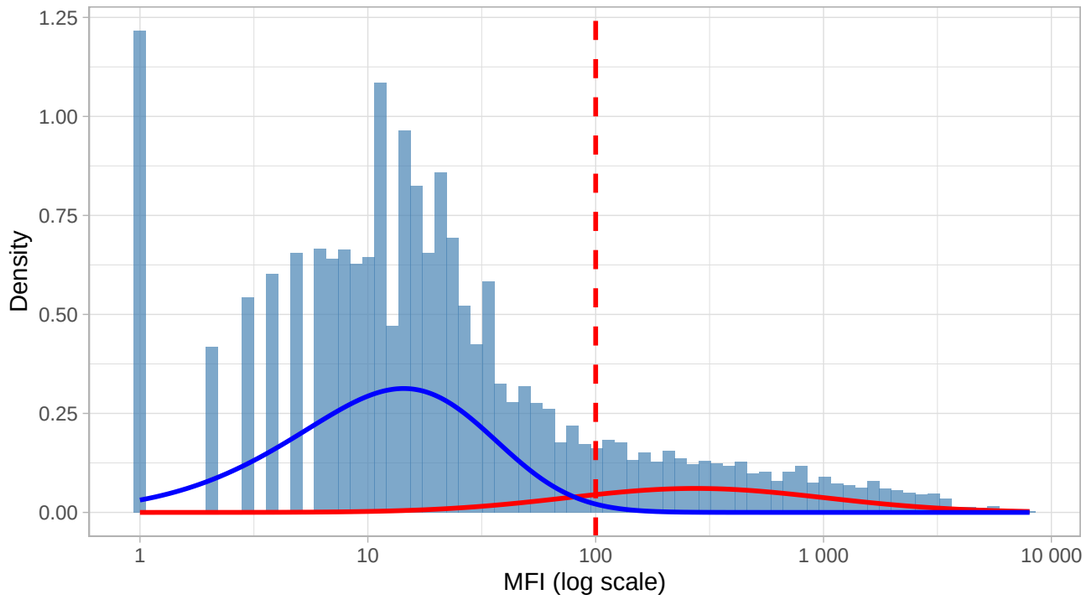


# Diagnostics: ct_mompd

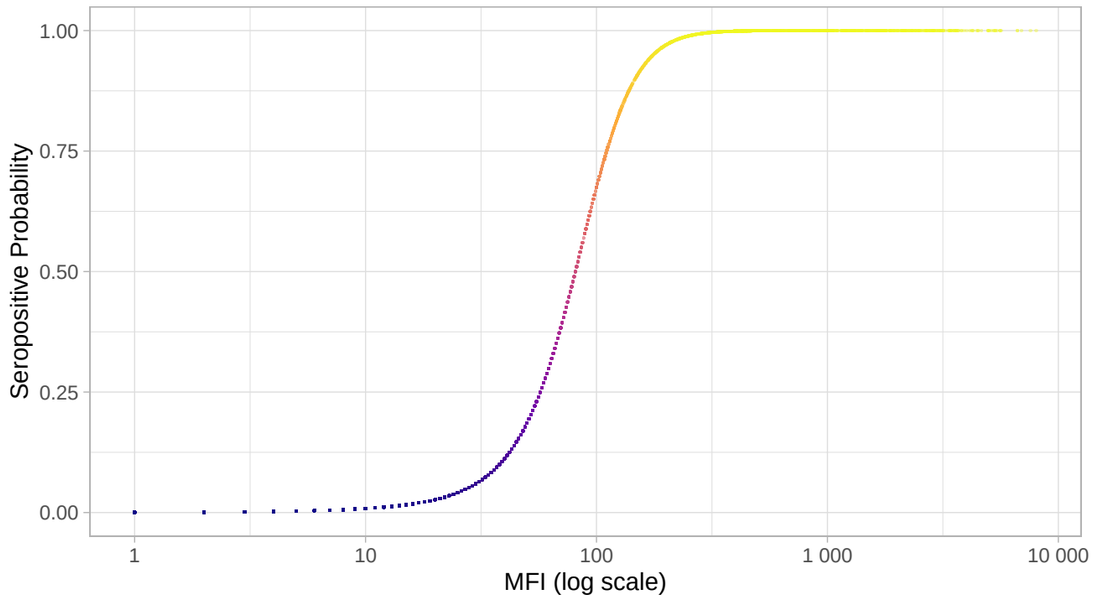
N=9424 | >0.95=1167 | <0.05=6253 | Ambig=2004

## Original MFI Distribution: ct_mompd

Hard cutoff threshold = 100

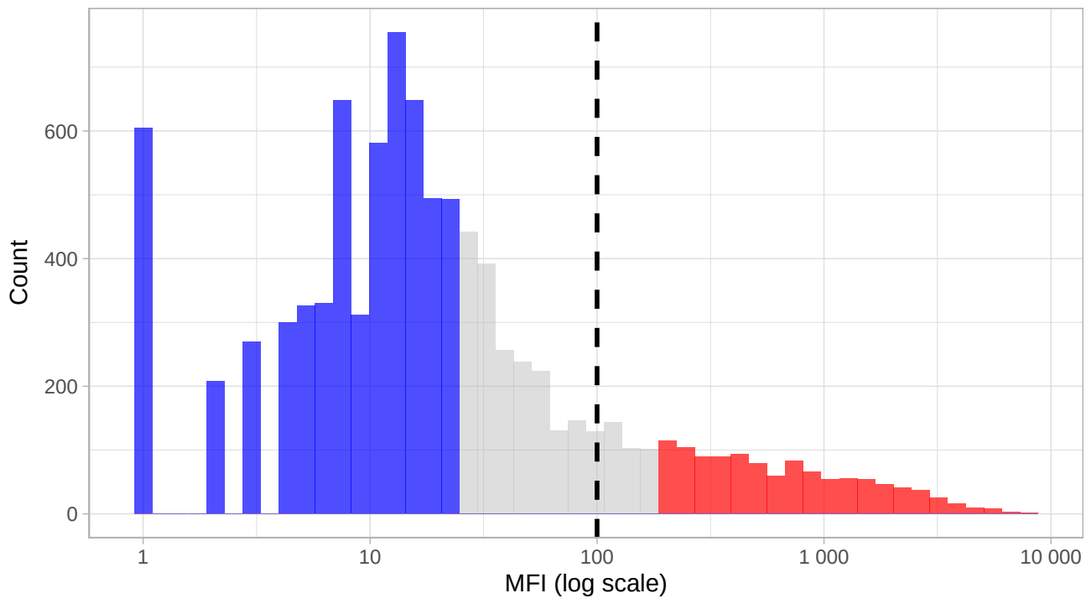



## IgG vs Seropositive Probability: ct_mompd



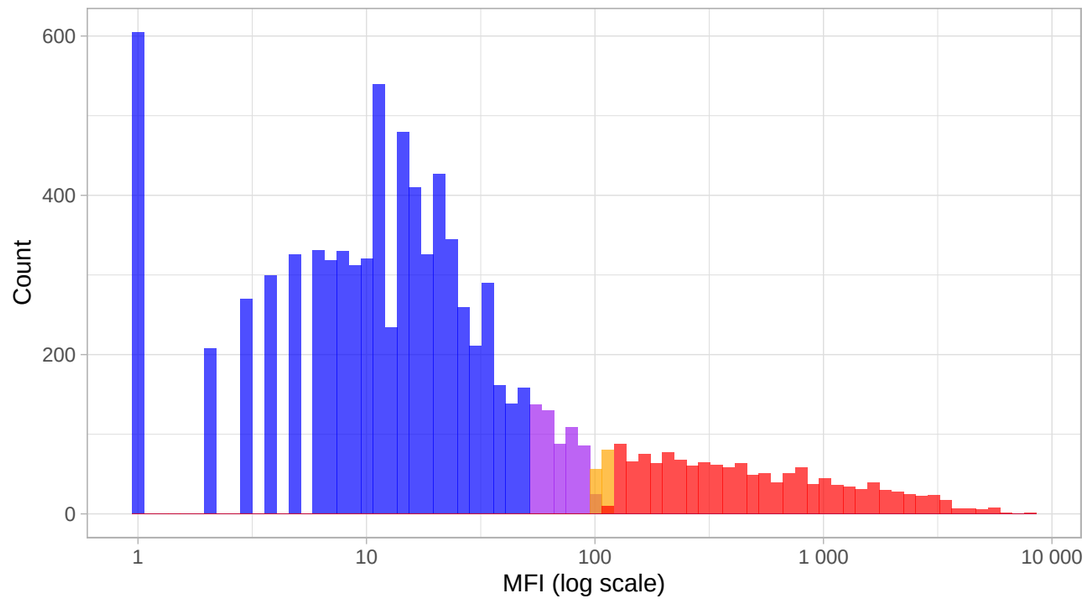

## High−Confidence Seropositive Distribution: ct_mompd

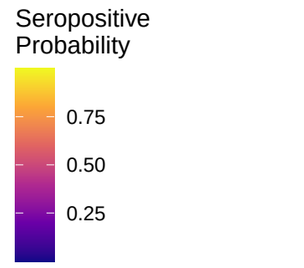
Prob threshold = 0.96




## Phenotype Distribution by Classification: ct_mompd

Comparing hard vs soft classifications



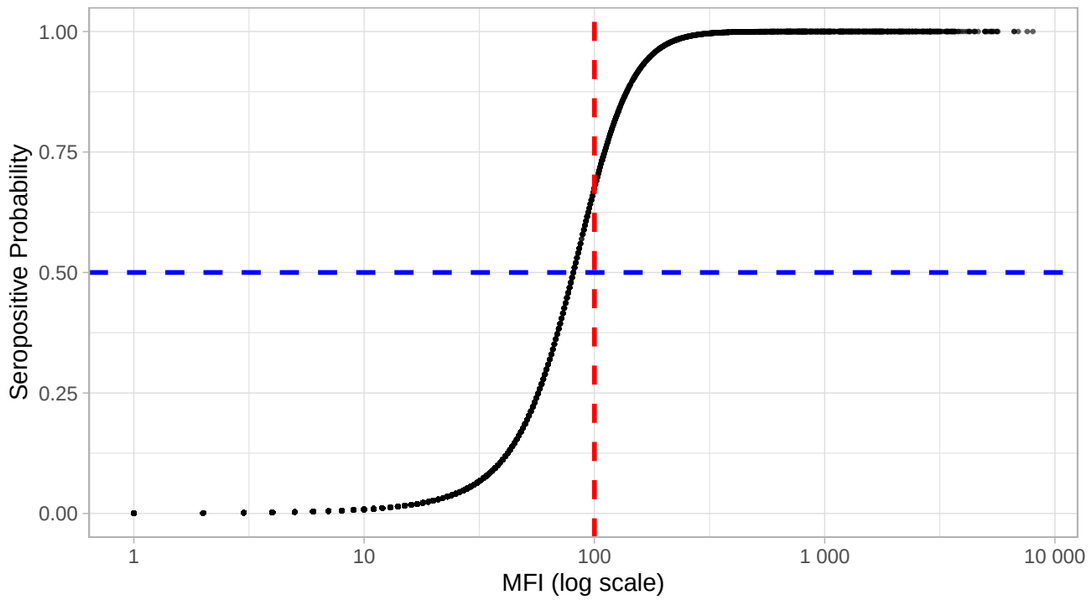







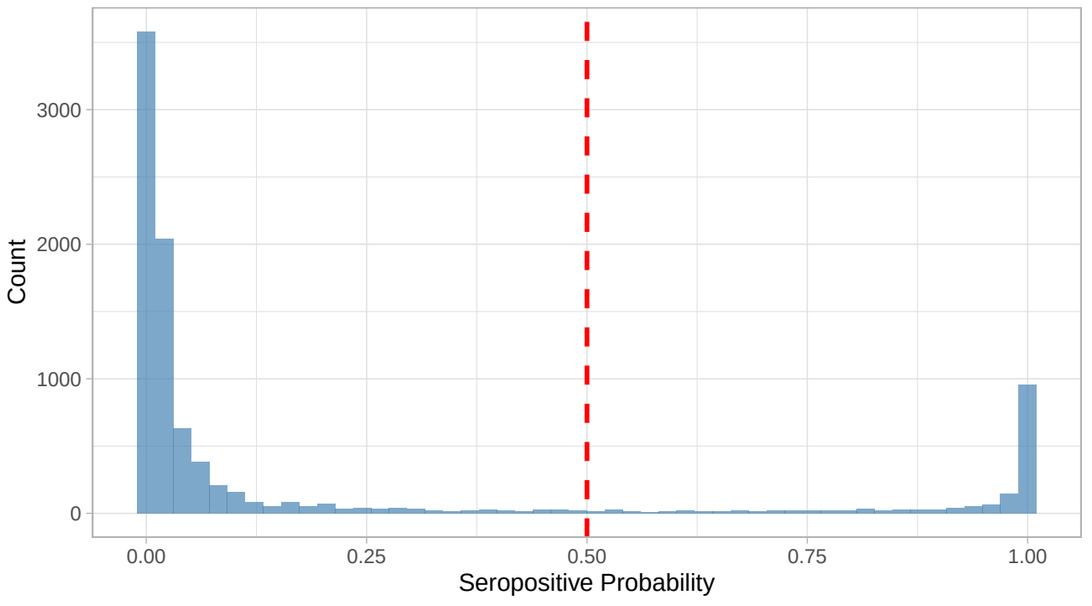

## IgG Level vs Seropositive Probability: ct_mompd

Red line = hard threshold, Blue line = 50% probability



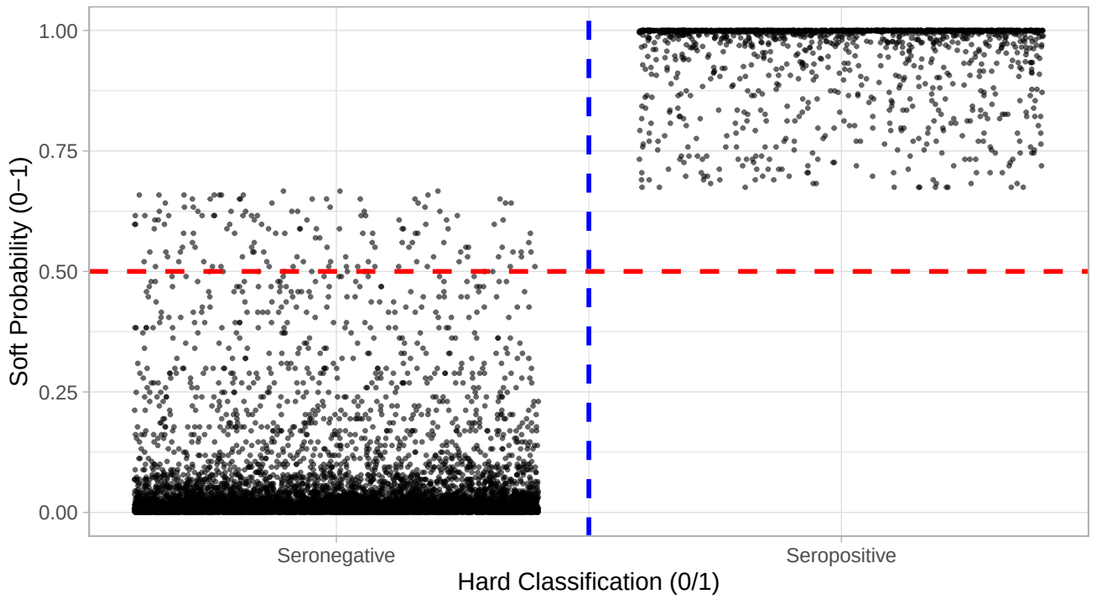

## Distribution of Seropositive Probabilities: ct_mompd

Red line = 50% threshold



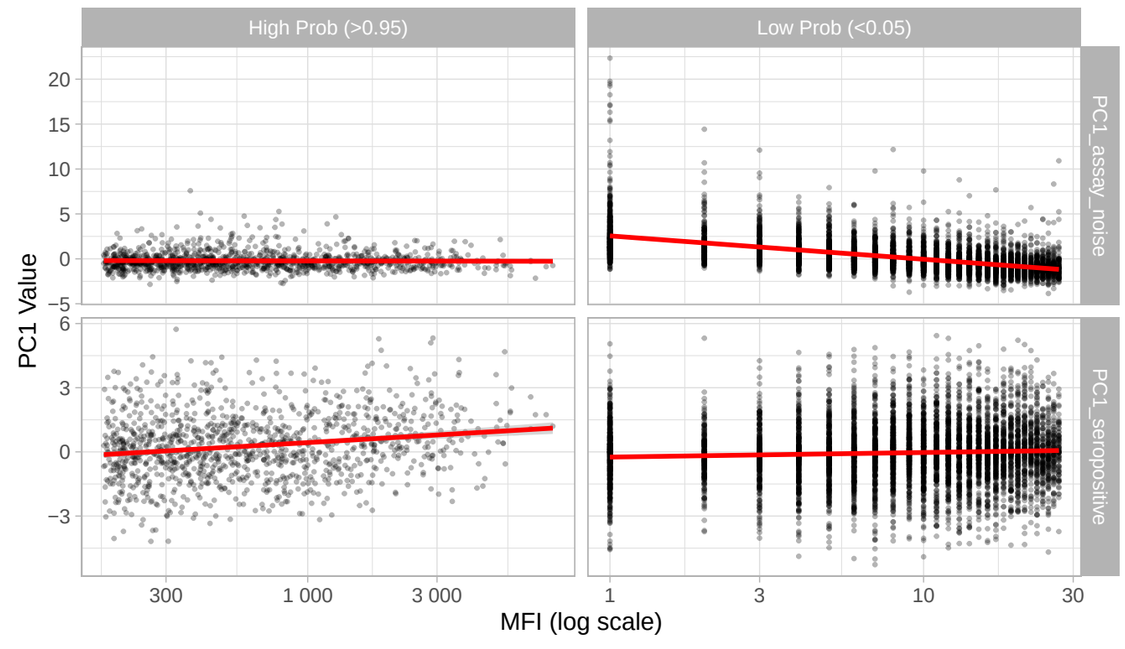

## Hard vs Soft Classification: ct_mompd

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: ct_mompd

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)

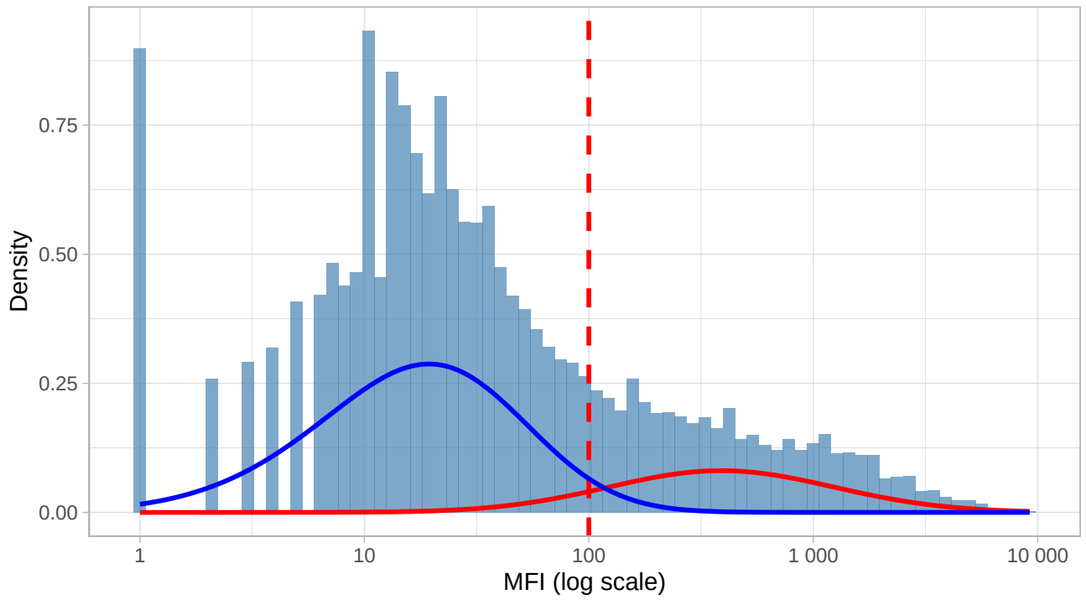


# Diagnostics: ct_tarpf2

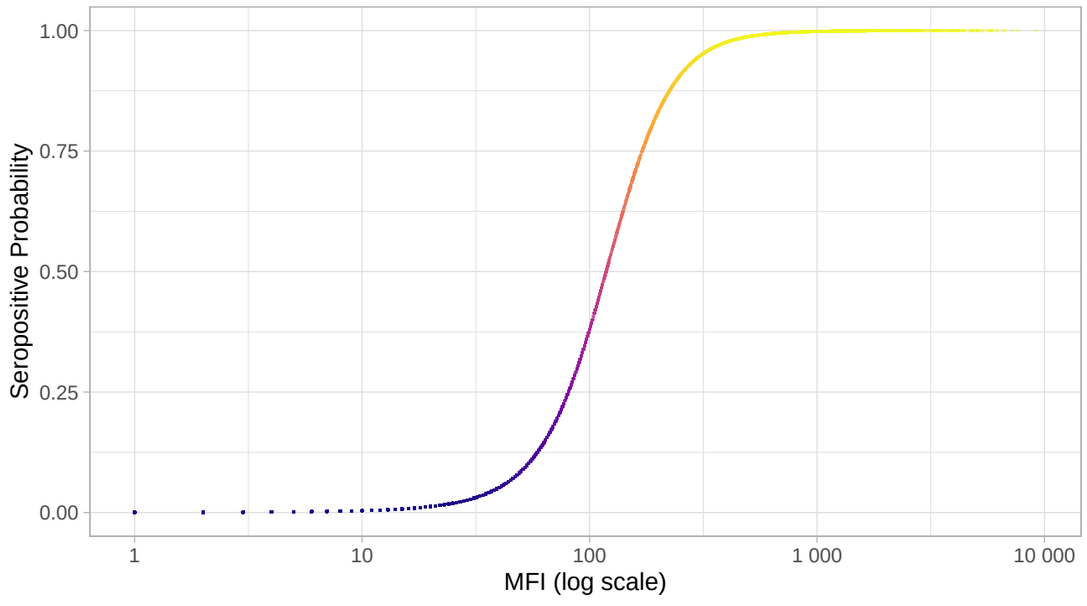
N=9424 | >0.95=1256 | <0.05=5857 | Ambig=2311

## Original MFI Distribution: ct_tarpf2

Hard cutoff threshold = 100

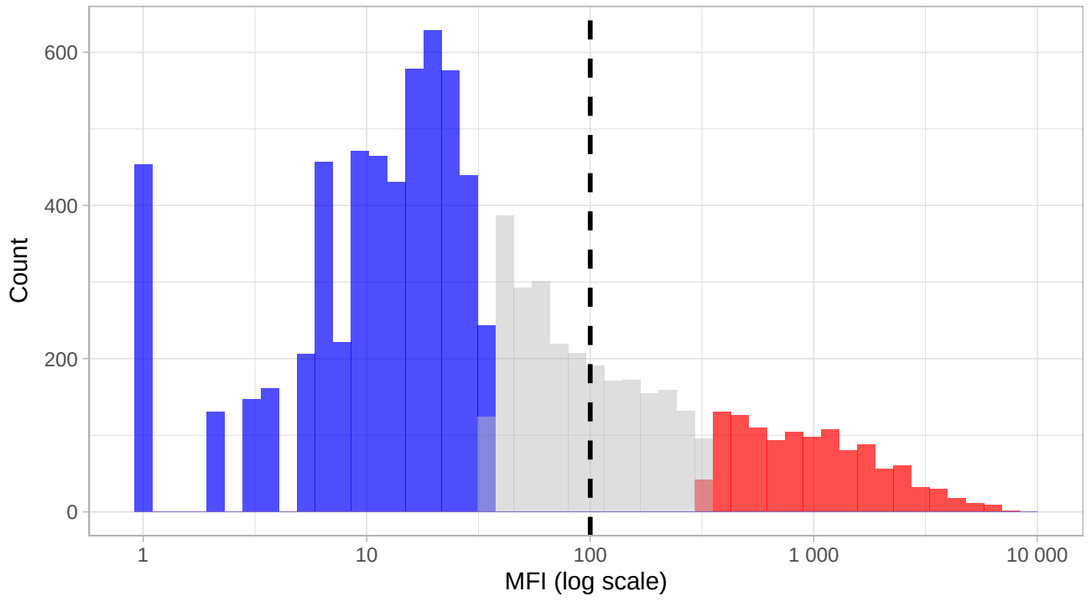



## IgG vs Seropositive Probability: ct_tarpf2



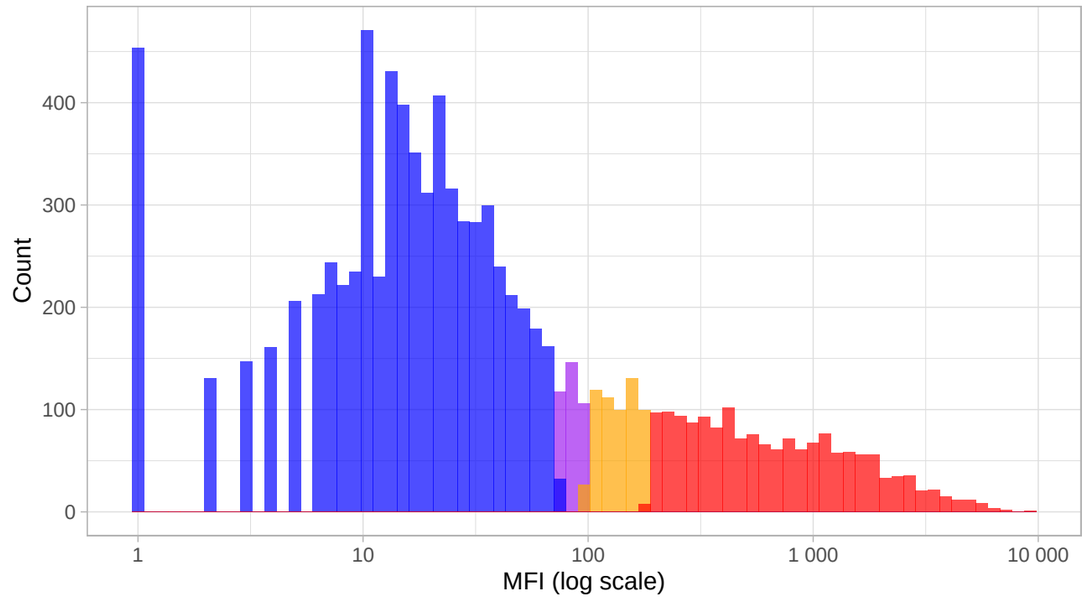

## High−Confidence Seropositive Distribution: ct_tarpf2

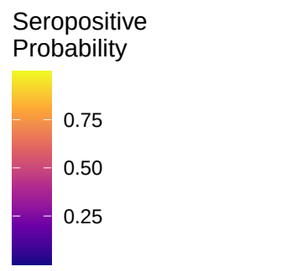
Prob threshold = 0.96




## Phenotype Distribution by Classification: ct_tarpf2

Comparing hard vs soft classifications



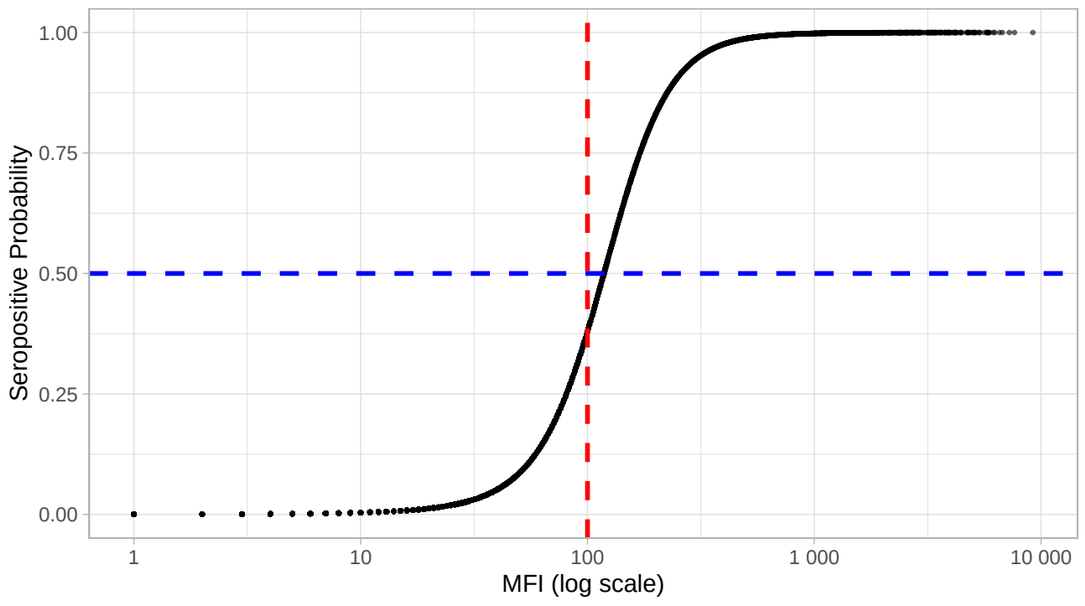







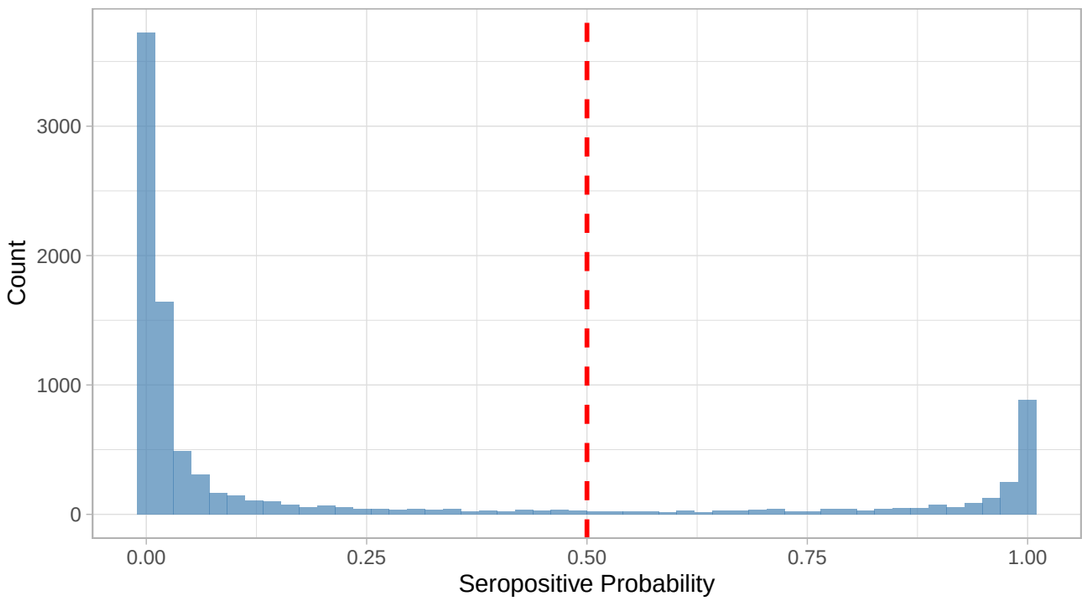

## IgG Level vs Seropositive Probability: ct_tarpf2

Red line = hard threshold, Blue line = 50% probability



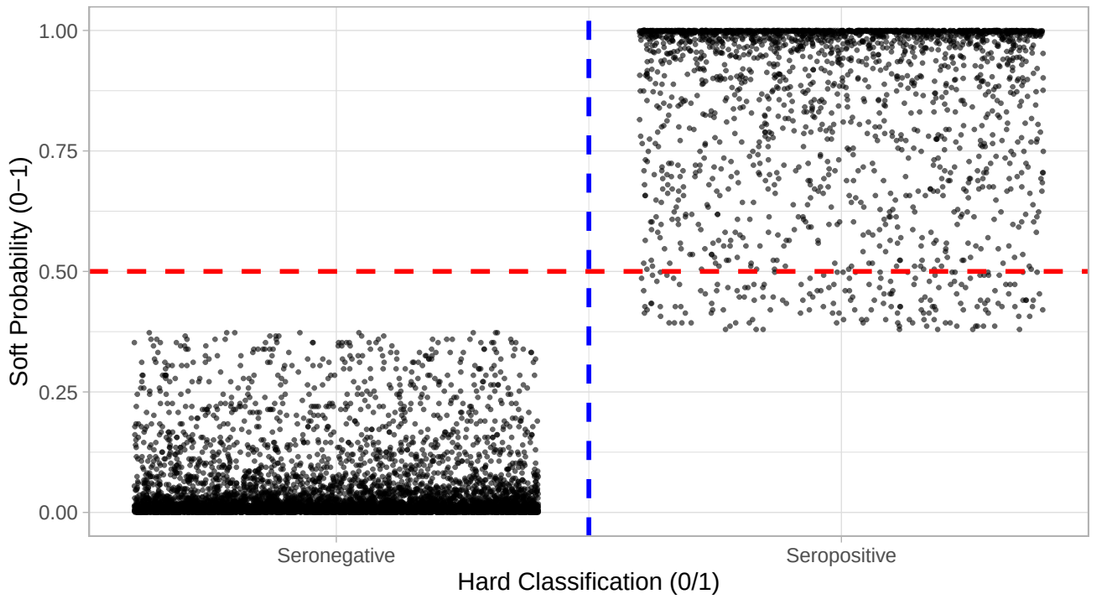

## Distribution of Seropositive Probabilities: ct_tarpf2

Red line = 50% threshold




## Hard vs Soft Classification: ct_tarpf2

Red line = 50% soft threshold, Blue line = hard threshold




## PC1 Components vs IgG Level: ct_tarpf2

Top: PC1_assay_noise (seroneg), Bottom: PC1_seropositive (seropos)